

FILE

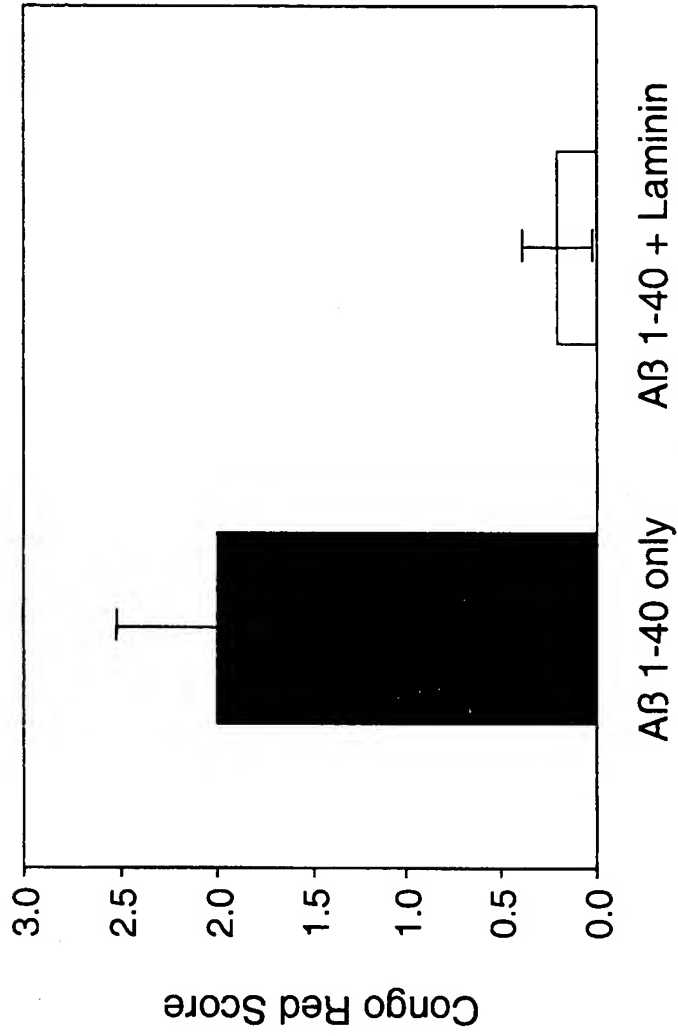
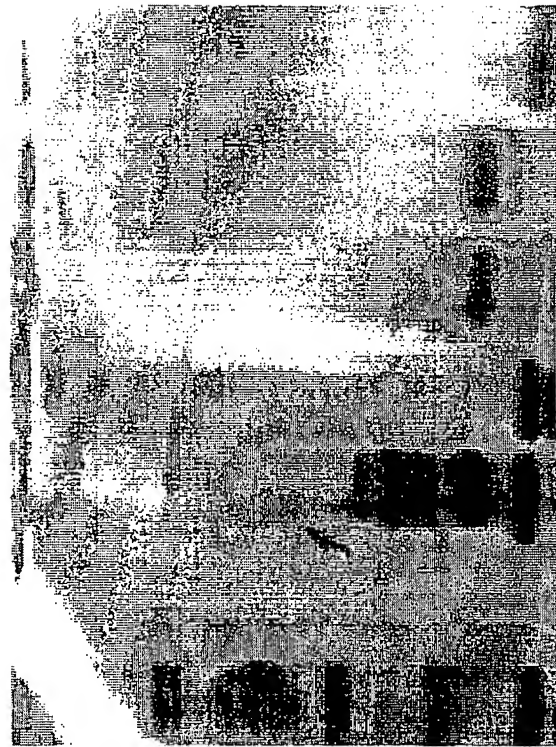


Figure 1



203-  
118-  
86-  
60-  
30-

1 2 3 4 5

**Figure 2**

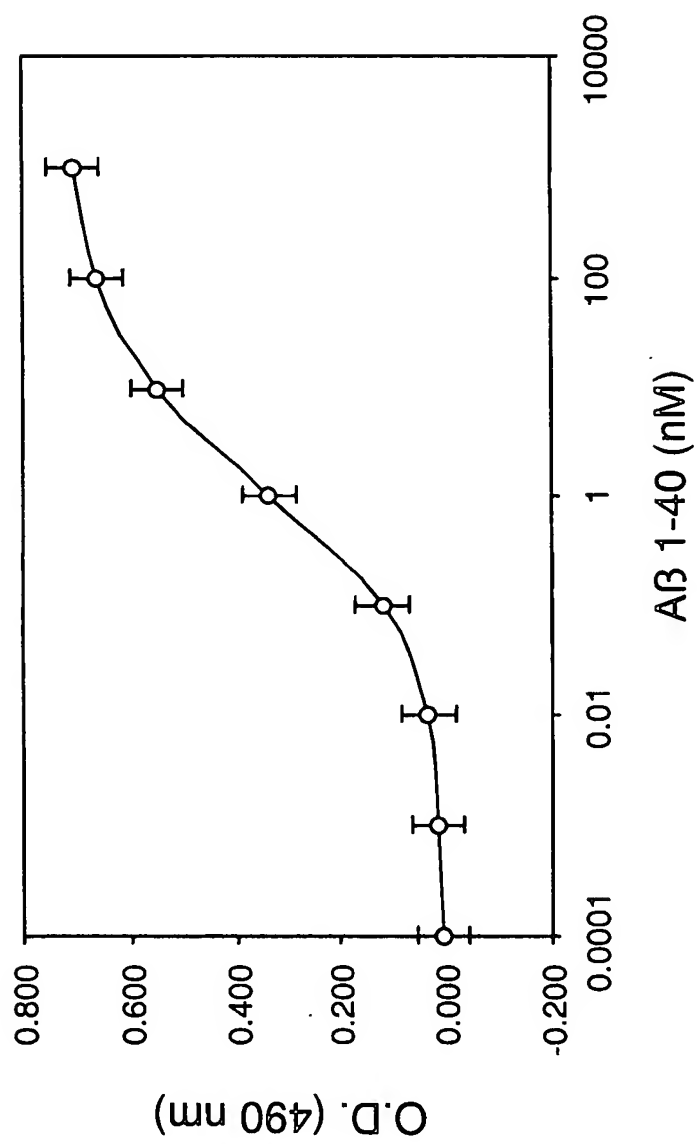


Figure 3

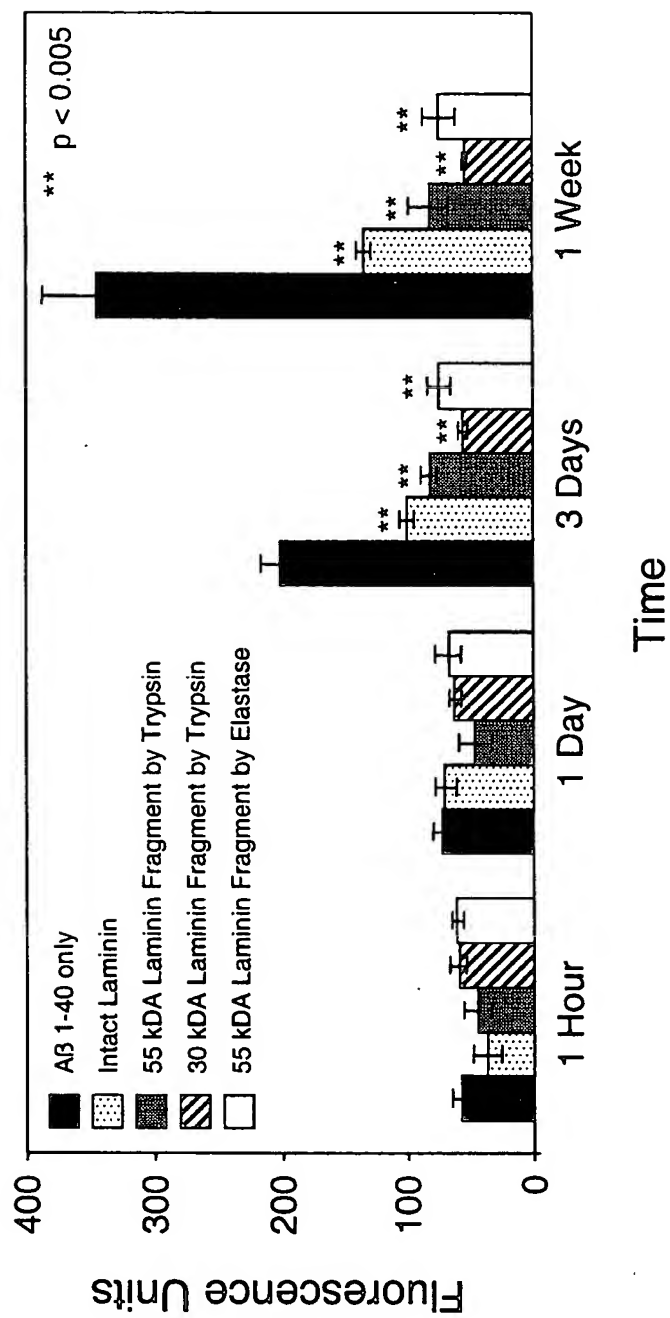


Figure 4

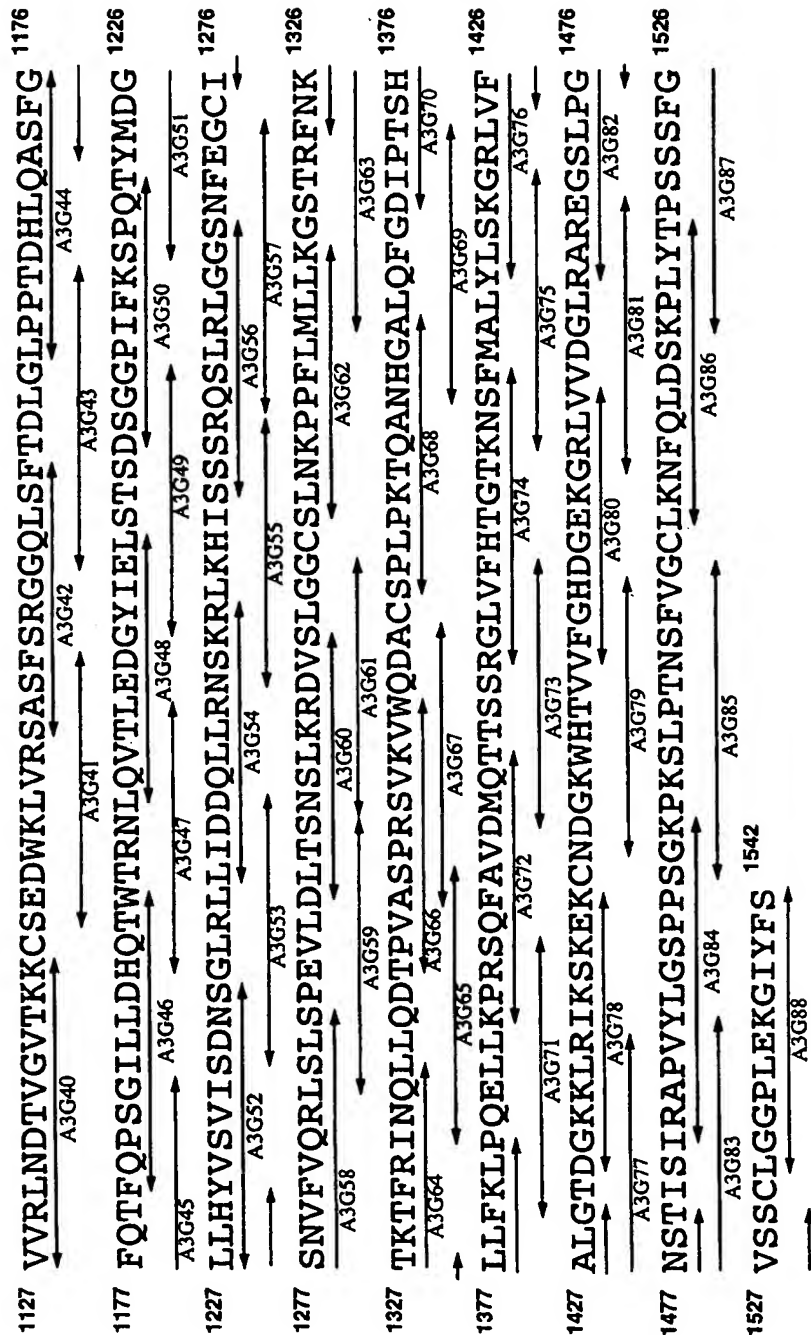


Figure 5

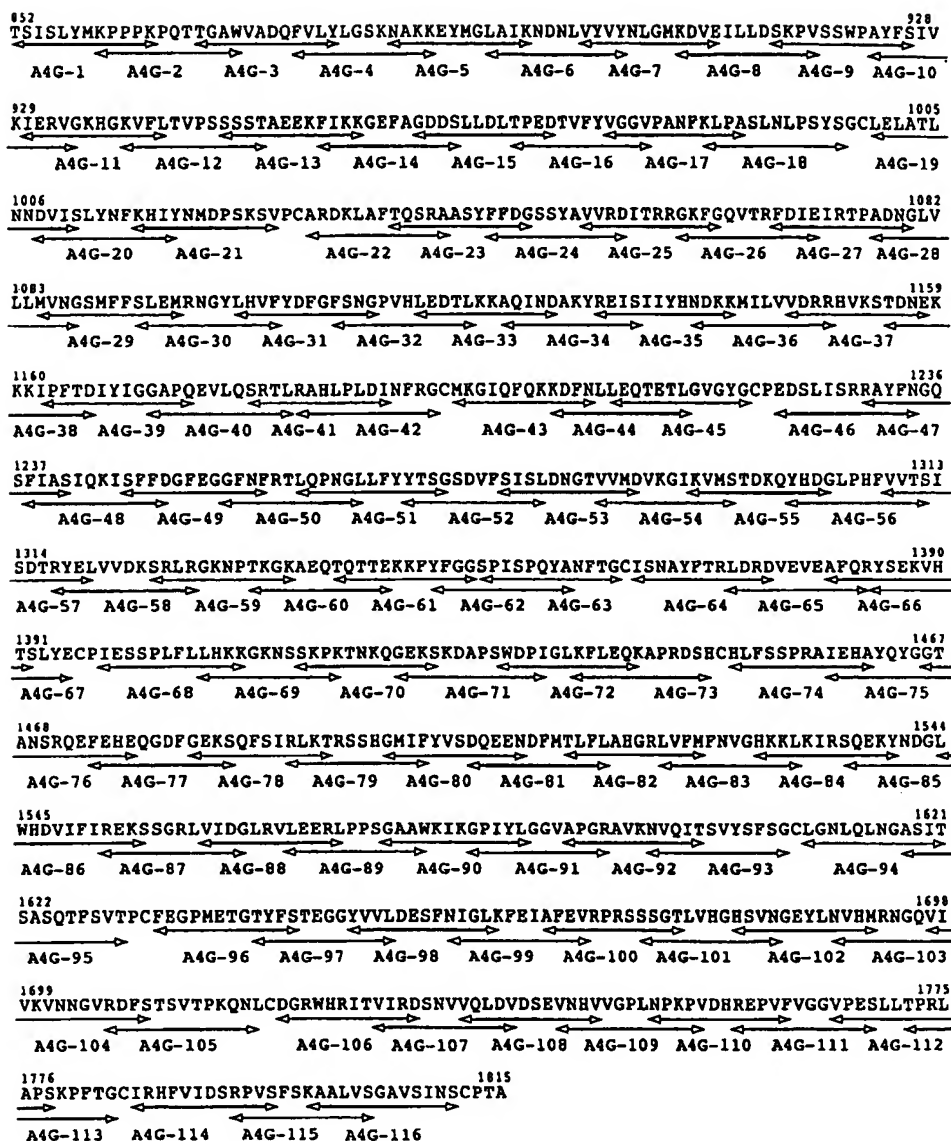


Figure 6



Figure 7

PEPTIDES	Laminin Chain and Amino Acid Sequence Number	Amino Acid Sequence	% Disruption/ Disassembly of Fibrillar A8 (A8:Peptide Molar Ratio of 1:6)
AG73	Alpha-1 chain; residues 2719-2730	RKRLQVQLSIRT	46 % (S; p < 0.01)***
A3	Alpha-3 chain; residues 2243-2254	KPRLQFSLDIQT	23 % (S; p < 0.01)
A5	Alpha-5 chain; residues 3275-3286	RNRLHLSMLVRP	22 % (S; p<0.01)
C-16	Gamma-1 chain; residues 139-150	KAFDITYVRLKF	28 % (S; p<0.01)***
LAM-L	Alpha-1 chain; residues 2097-2108	AASIKVAVSADR	24 % (S; p<0.01)
A-13	Alpha-1 chain; residues 97-109	RQVFQVAYIIKA	30 % (S; p<0.01)***
HA3G45	Alpha-3 chain; residues 1173-1184	ASFGFQTFQPSG	21 % (S; p<0.05)
HA3G47	Alpha-3 chain; residues 1189-2000	HQTWTRNLQVTL	28 % (S; p<0.01)***
HA3G58	Alpha-3 chain; residues 1276-1287	ISNVFVQRLSLS	32 % (S; p<0.01)***
HA3G67	Alpha-3 chain; residues 1342-1353	ASPPSVKVVQDA	25 % (S; p<0.01)***
HA3G71	Alpha-3 chain; residues 1379-1390	FKLPQELLKPRS	23 % (S; p<0.05)
HA3G74	Alpha-3 chain; residues 1402-1414	RGLVFHTGTKNSF	32 % (S; p<0.01)***
HA3G75	Alpha-3 chain; residues 1411-1422	KNSFMALYLSKG	24 % (S; p<0.01)
HA3G76	Alpha-3 chain; residues 1418-1429	YLSKGRLVFALG	26 % (S; p<0.01)***
HA3G79	Alpha-3 chain; residues 1444-1455	NDGKWHTVVFGH	27 % (S; p<0.01)***
HA3G83	Alpha-3 chain; residues 1477-1487	GNSTISIRAPVY	33 % (S; p<0.01)***
A4G31	Alpha-4 chain; residues 1101-1112	LHVFYDFGFSNG	23 % (S; p<0.01)
A4G82	Alpha-4 chain; residues 1513-1524	TLFLAHGRLVFM	30 % (S; p<0.01)***
A5G15	Alpha-5 chain; residues 2792-2803	HPDDFVFYVGGY	30 % (S; p<0.01)***
A5G35	Alpha-5 chain; residues 2950-2961	VLVRVERATVFS	20 % (S; p<0.05)
A5G46	Alpha-5 chain; residues 3043-3054	FLPLALPDVAPI	21 % (S; p<0.05)
A5G56	Alpha-5 chain; residues 3135-3146	WLYVDDQLQLVK	27 % (S; p<0.01)***
A5G71	Alpha-5 chain; residues 3259-3270	GPLPSYLQFVGI	22 % (S; p<0.05)
A5G80	Alpha-5 chain; residues 3329-3340	VQSRQHSRAGQW	25 % (S; p<0.01)***
A5G81	Alpha-5 chain; residues 3337-3348	AGQWHRVSVRWG	41 % (S; p<0.01)***
A5G82	Alpha-5 chain; residues 3345-3356	VRWGMQQIQLVV	29 % (S; p<0.01)***
A5G84	Alpha-5 chain; residues 3361-3372	TWSQKALHHRVP	27 % (S; p<0.01)***
A5G101	Alpha-5 chain; residues 3516-3527	DGRWHRVAVIMG	39 % (S; p<0.01)***
A5G109	Alpha-5 chain; residues 3587-3598	APVNV TASVQIQ	32 % (S; p<0.01)***
A5G110	Alpha-5 chain; residues 3594-3605	SVQIQGAVGMRG	23 % (S; p<0.05)

\*\*\* Selected for Further Testing

Figure 8



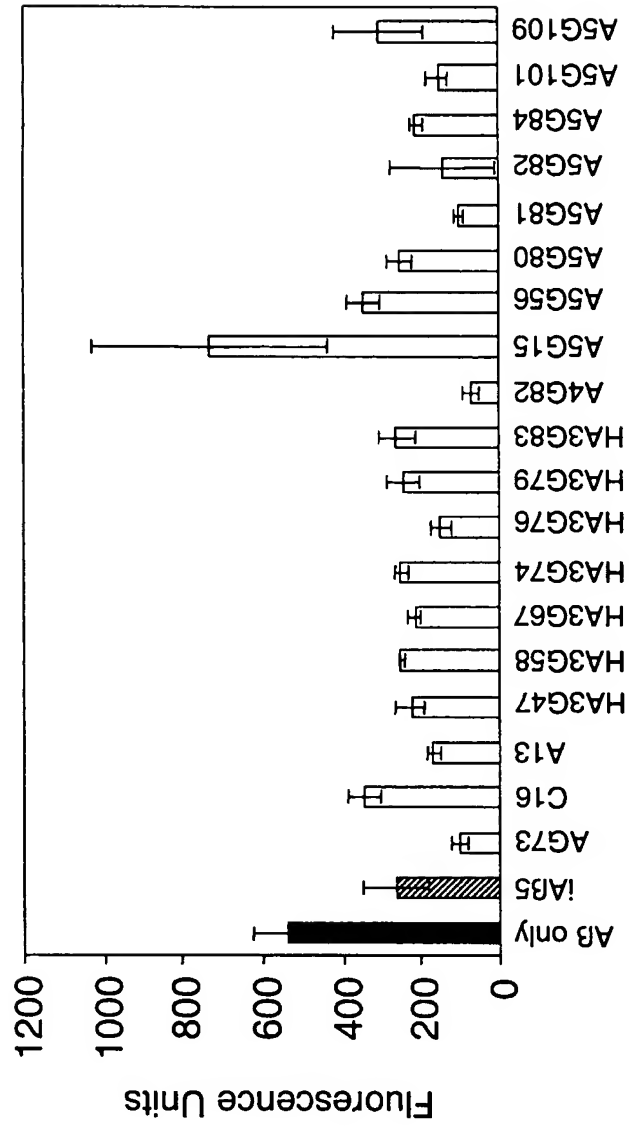


Figure 9

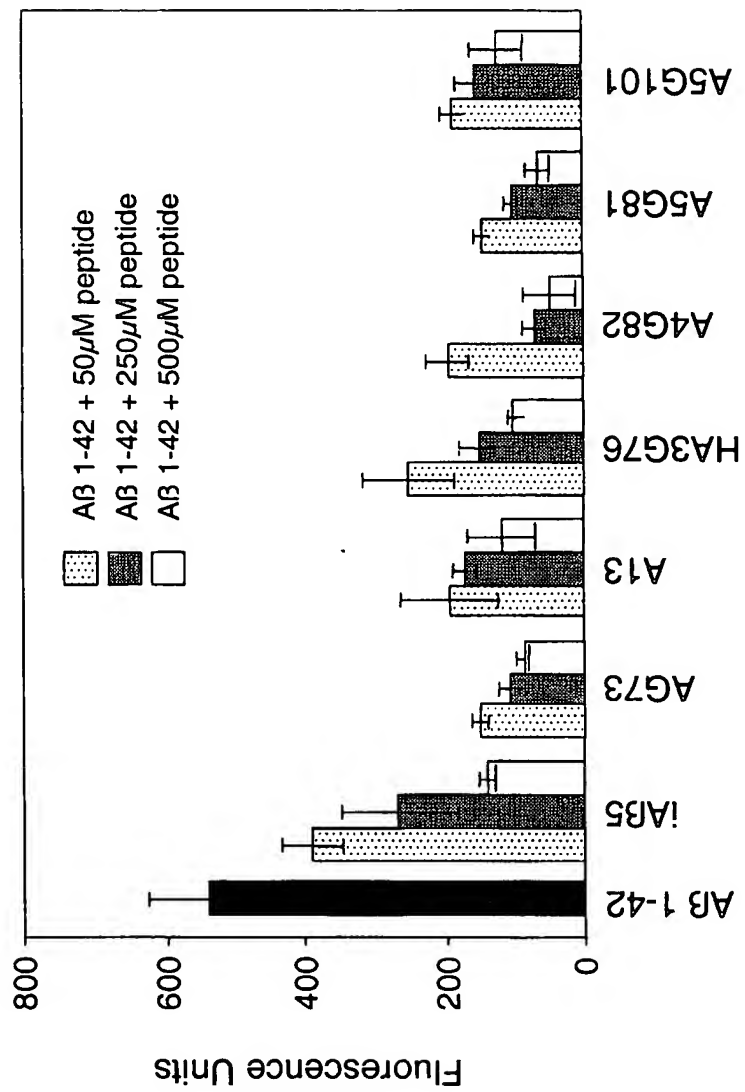


Figure 10

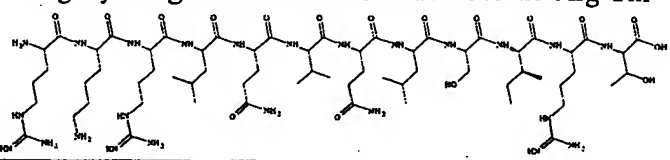
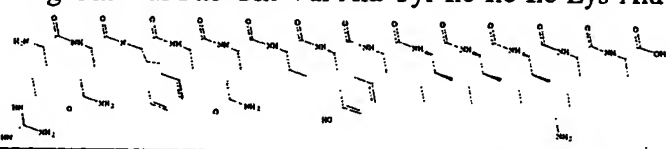
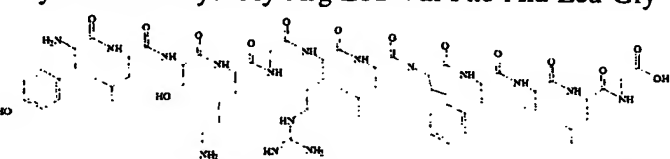
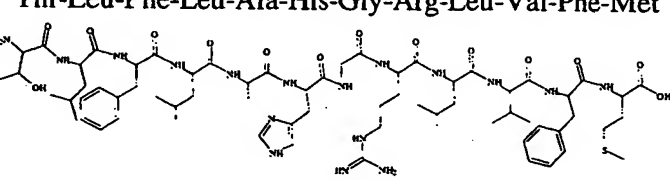
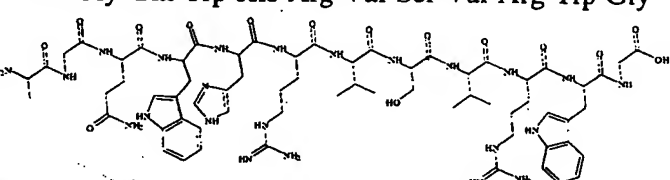
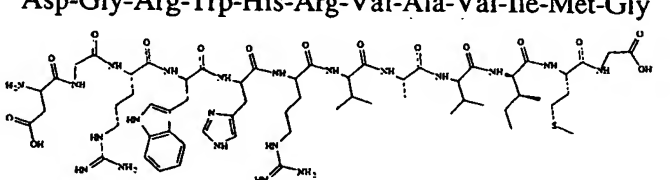
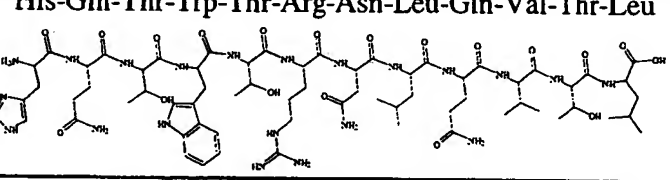
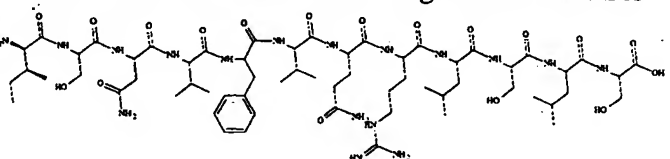
PTI-	Structure	Formula	MW
<b>DP-001</b> D-AG73 or D-A1 A1-chain 2719-2730	<b>Arg-Lys-Arg-Lue-Gln-Val-Gln-Leu-Ser-Ile-Arg-Thr</b> 	$C_{64}H_{120}N_{24}O_{17}$	1497.82
<b>DP-002</b> D-A13 A1-chain 97-109	<b>Arg-Gln-Val-Phe-Gln-Val-Ala-Tyr-Ile-Ile-Ile-Lys-Ala</b> 	$C_{74}H_{121}N_{19}O_{17}$	1548.90
<b>DP-003</b> D-HA3G76 A3-chain 1418-1429	<b>Tyr-Leu-Ser-Lys-Gly-Arg-Leu-Val-Phe-Ala-Leu-Gly</b> 	$C_{63}H_{102}N_{16}O_{15}$	1323.61
<b>DP-004</b> D-A4G82 A4-chain 1513-1524	<b>Thr-Leu-Phe-Leu-Ala-His-Gly-Arg-Leu-Val-Phe-Met</b> 	$C_{67}H_{105}N_{17}O_{14}S$	1404.75
<b>DP-005</b> D-A5G81 A5-chain 3337-3348	<b>Ala-Gly-Gln-Trp-His-Arg-Val-Ser-Val-Arg-Trp-Gly</b> 	$C_{65}H_{95}N_{23}O_{15}$	1438.62
<b>DP-006</b> D-A5G101 A5-chain 3516-3527	<b>Asp-Gly-Arg-Trp-His-Arg-Val-Ala-Val-Ile-Met-Gly</b> 	$C_{61}H_{97}N_{21}O_{15}S$	1396.65
<b>DP-007</b> D-HA3G47 A3-chain 1189-2000	<b>His-Gln-Thr-Trp-Thr-Arg-Asn-Leu-Gln-Val-Thr-Leu</b> 	$C_{66}H_{105}N_{21}O_{19}$	1496.70
<b>DP-008</b> D-HA3G58 A3-chain 1276-1287	<b>Ile-Ser-Asn-Val-Phe-Val-Gln-Arg-Leu-Ser-Leu-Ser</b> 	$C_{61}H_{103}N_{17}O_{18}$	1362.60

Fig. 12a

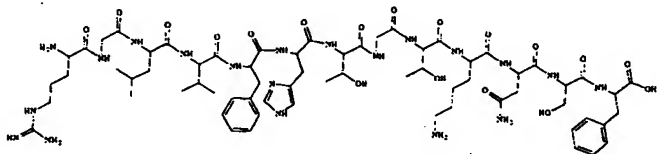
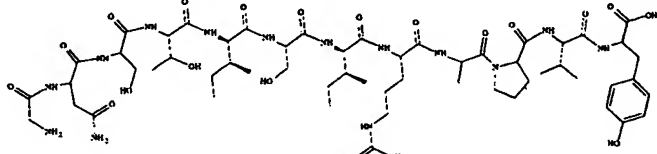
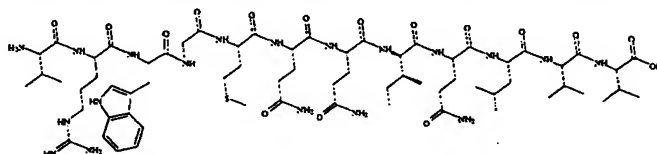
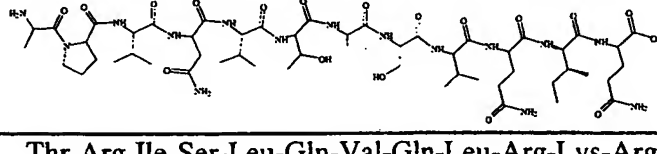
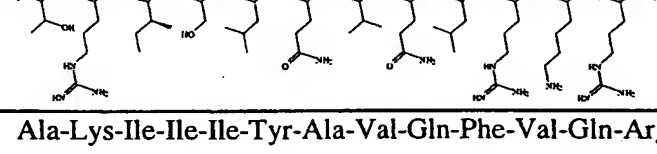
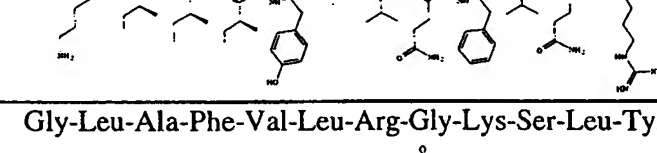
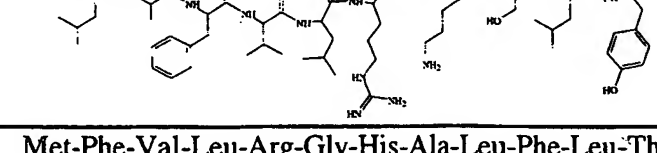
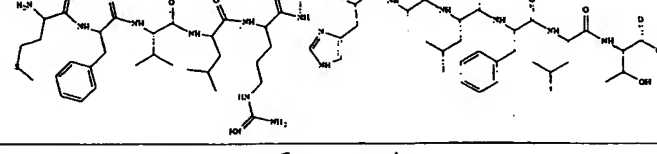
PTI-	Structure	Formula	MW
<b>DP-009</b> D-HA3G74 A3-chain 1402-1414	<b>Arg-Gly-Leu-Val-Phe-His-Thr-Gly-Thr-Lys-Asn-Ser-Phe</b> 	$C_{66}H_{102}N_{20}O_{18}$	1463.67
<b>DP-010</b> D-HA3G83 A3-chain 1477-1487	<b>Gly-Asn-Ser-Thr-Ile-Ser-Ile-Arg-Ala-Pro-Val-Tyr</b> 	$C_{56}H_{92}N_{16}O_{18}$	1277.45
<b>DP-011</b> D-A5G82 A5-chain 3345-3356	<b>Val-Arg-Trp-Gly-Met-Gln-Gln-Ile-Gln-Leu-Val-Val</b> 	$C_{66}H_{109}N_{19}O_{16}S$	1456.78
<b>DP-012</b> D-A5G109 A3-chain 1444-1455	<b>Ala-Pro-Val-Asn-Val-Thr-Ala-Ser-Val-Gln-Ile-Gln</b> 	$C_{53}H_{91}N_{15}O_{18}$	1226.40
<b>DP-013</b> D-rAG73 or D-rA1 A1-chain r2719-2730 or 2730-2719	<b>Thr-Arg-Ile-Ser-Leu-Gln-Val-Gln-Leu-Arg-Lys-Arg</b> 	$C_{64}H_{120}N_{24}O_{17}$	1497.82
<b>DP-014</b> D-rA13 A1-chain r92-109 or 109-92	<b>Ala-Lys-Ile-Ile-Ile-Tyr-Ala-Val-Gln-Phe-Val-Gln-Arg</b> 	$C_{74}H_{121}N_{19}O_{17}$	1547.92
<b>DP-015</b> D-rHA3G76 A3-chain r1418-1429 or 1429-1418	<b>Gly-Leu-Ala-Phe-Val-Leu-Arg-Gly-Lys-Ser-Leu-Tyr</b> 	$C_{63}H_{102}N_{16}O_{15}$	1323.61
<b>DP-016</b> D-rA4G82 A4-chain r1513-1524 or 1524-1513	<b>Met-Phe-Val-Leu-Arg-Gly-His-Ala-Leu-Phe-Leu-Thr</b> 	$C_{67}H_{105}N_{17}O_{14}S$	1404.75

Fig. 12b

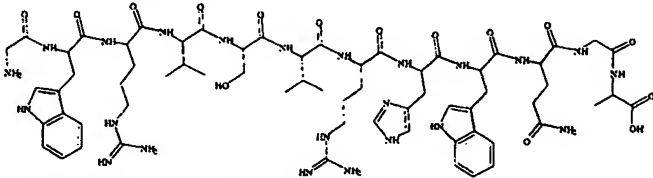
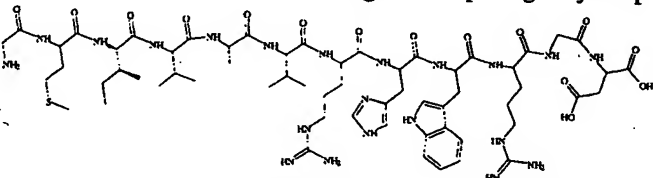
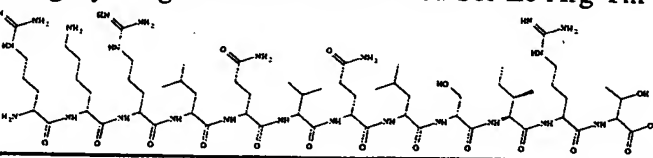
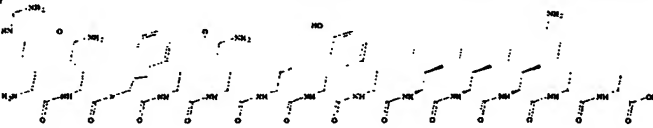
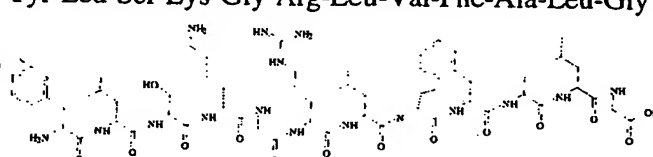
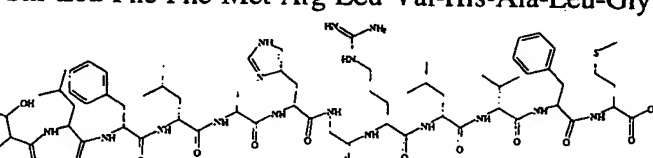
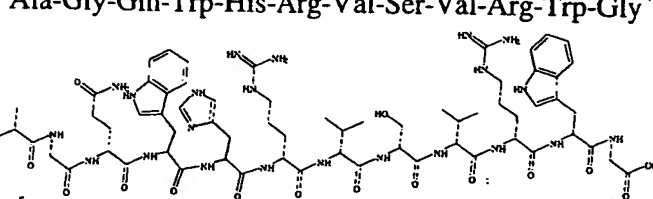
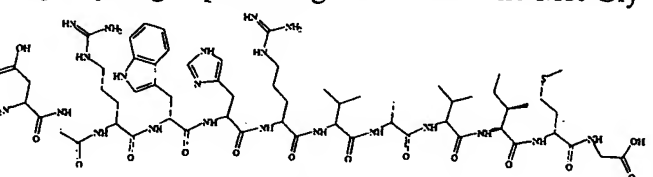
PTI-	Structure	Formula	MW
<b>DP-017</b> D-rA5G81 A5-chain r3337-3348 or 3348-3337	<b>Gly-Trp-Arg-Val-Ser-Val-Arg-His-Trp-Gln-Gly-Ala</b> 	$C_{65}H_{95}N_{23}O_{15}$	1438.62
<b>DP-018</b> D-rA5G101 A5-chain r3516-3527 or 3527-3516	<b>Gly-Met-Ile-Val-Ala-Val-Arg-His-Trp-Arg-Gly-Asp</b> 	$C_{61}H_{97}N_{21}O_{15}S$	1396.65
<b>LP-019</b> AG73 or A1 A1-chain 2719-2730	<b>Arg-Lys-Arg-Lue-Gln-Val-Gln-Leu-Ser-Ile-Arg-Thr</b> 	$C_{64}H_{120}N_{24}O_{17}$	1497.82
<b>LP-020</b> A13 A1-chain 92-109	<b>Arg-Gln-Val-Phe-Gln-Val-Ala-Tyr-Ile-Ile-Lys-Ala</b> 	$C_{74}H_{121}N_{19}O_{17}$	1548.90
<b>LP-021</b> HA3G76 A3-chain 1418-1429	<b>Tyr-Leu-Ser-Lys-Gly-Arg-Leu-Val-Phe-Ala-Leu-Gly</b> 	$C_{63}H_{102}N_{16}O_{15}$	1323.61
<b>LP-022</b> A4G82 A4-chain 1513-1524	<b>Thr-Leu-Phe-Phe-Met-Arg-Leu-Val-His-Ala-Leu-Gly</b> 	$C_{67}H_{105}N_{17}O_{14}S$	1404.75
<b>LP-023</b> A5G81 A5-chain 3337-3348	<b>Ala-Gly-Gln-Trp-His-Arg-Val-Ser-Val-Arg-Trp-Gly</b> 	$C_{65}H_{95}N_{23}O_{15}$	1438.62
<b>LP-024</b> A5G101 A5-chain 3516-3527	<b>Asp-Gly-Arg-Trp-His-Arg-Val-Ala-Val-Ile-Met-Gly</b> 	$C_{61}H_{97}N_{21}O_{15}S$	1396.65

Fig. 12c

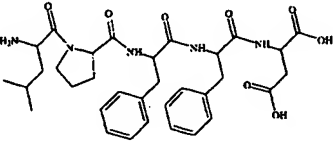
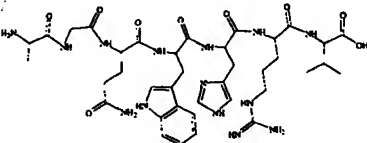
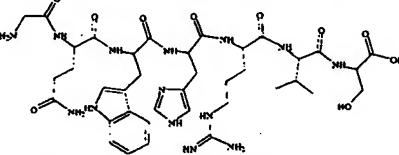
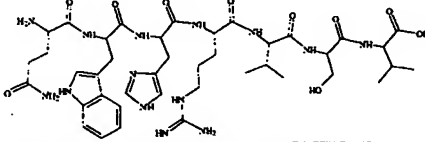
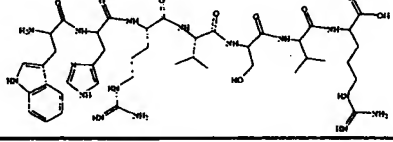
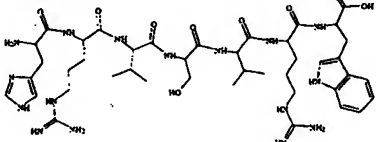
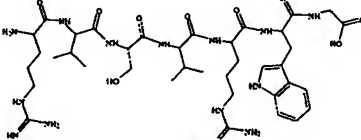
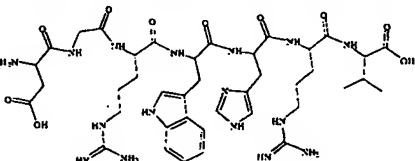
PTI-	Structure	Formula	MW
LP-025 β-sheet breaker or iAβ5	Leu-Pro-Phe-Phe-Asp 	$C_{33}H_{43}N_5O_8$	637.74
DP-026 Trc'n 5;1-7	Ala-Gly-Gln-Trp-His-Arg-Val 	$C_{38}H_{56}N_{14}O_9$	852.95
DP-027 Trc'n 5;2-8	Gly-Gln-Trp-His-Arg-Val-Ser 	$C_{38}H_{56}N_{14}O_{10}$	868.95
DP-028 Trc'n 5;3-9	Gln-Trp-His-Arg-Val-Ser-Val 	$C_{41}H_{62}N_{14}O_{10}$	911.04
DP-029 Trc'n 5;4-10	Trp-His-Arg-Val-Ser-Val-Arg 	$C_{42}H_{66}N_{16}O_9$	939.09
DP-030 Trc'n 5;5-11	His-Arg-Val-Ser-Val-Arg-Trp 	$C_{42}H_{66}N_{16}O_9$	939.09
DP-031 Trc'n 5;6-12	Arg-Val-Ser-Val-Arg-Trp-Gly 	$C_{38}H_{62}N_{14}O_9$	859.00
DP-032 Trc'n 6;1-7	Asp-Gly-Arg-Trp-His-Arg-Val 	$C_{40}H_{60}N_{16}O_{10}$	925.02

Fig. 12d

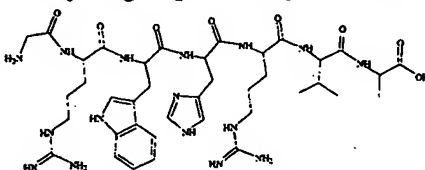
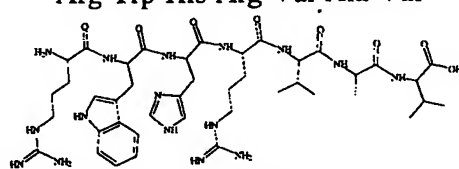
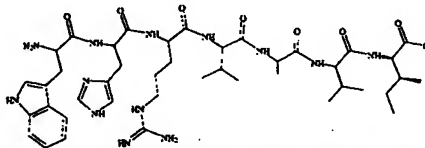
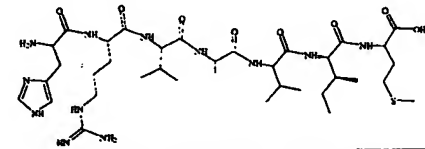
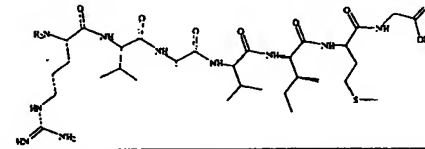
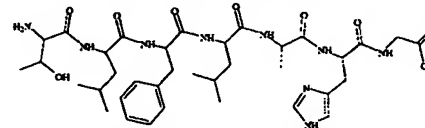
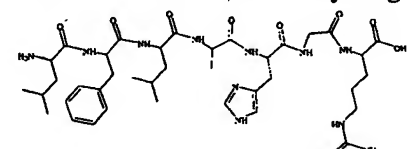
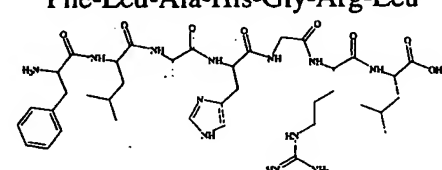
PTI-	Structure	Formula	MW
DP-033 Trc'n 6;2-8	<p>Gly-Arg-Trp-His-Arg-Val-Ala</p> 	$C_{39}H_{60}N_{16}O_8$	881.01
DP-034 Trc'n 6;3-9	<p>Arg-Trp-His-Arg-Val-Ala-Val</p> 	$C_{42}H_{66}N_{16}O_8$	923.09
DP-035 Trc'n 6;4-10	<p>Trp-His-Arg-Val-Ala-Val-Ile</p> 	$C_{42}H_{65}N_{13}O_8$	880.07
DP-036 Trc'n 6;5-11	<p>His-Arg-Val-Ala-Val-Ile-Met</p> 	$C_{36}H_{64}N_{12}O_8S$	825.05
DP-037 Trc'n 6;6-12	<p>Arg-Val-Ala-Val-Ile-Met-Gly</p> 	$C_{32}H_{60}N_{10}O_8S$	744.96
DP-038 Trc'n 4;1-7	<p>Thr-Leu-Phe-Leu-Ala-His-Gly</p> 	$C_{36}H_{55}N_9O_9$	757.89
DP-039 Trc'n 4;2-8	<p>Leu-Phe-Leu-Ala-His-Gly-Arg</p> 	$C_{38}H_{60}N_{12}O_8$	812.97
DP-040 Trc'n 4;3-9	<p>Phe-Leu-Ala-His-Gly-Arg-Leu</p> 	$C_{38}H_{60}N_{12}O_8$	812.98

Fig. 12e

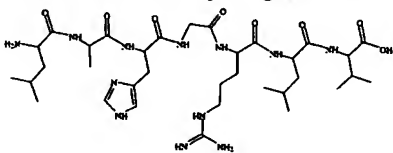
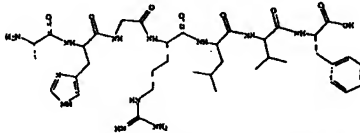
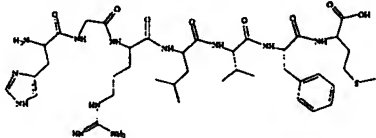
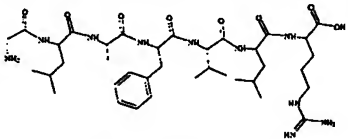
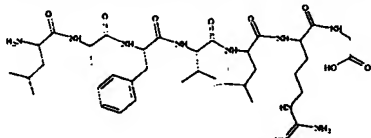
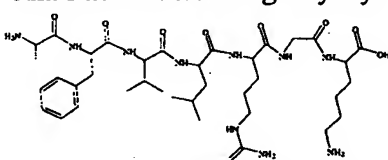
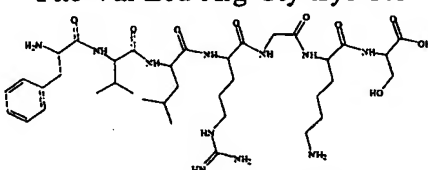
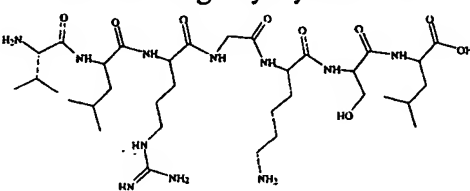
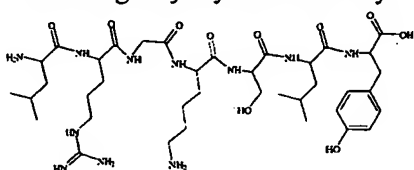
PTI-	Structure	Formula	MW
DP-041 Trc'n 4;4-10	<p>Leu-Ala-His-Gly-Arg-Leu-Val</p> 	$C_{34}H_{60}N_{12}O_8$	764.93
DP-042 Trc'n 4;5-11	<p>Ala-His-Gly-Arg-Leu-Val-Phe</p> 	$C_{37}H_{58}N_{12}O_8$	798.95
DP-043 Trc'n 4;6-12	<p>His-Gly-Arg-Leu-Val-Phe-Met</p> 	$C_{39}H_{62}N_{12}O_8S$	859.07
DP-044 Trc'n 15;1-7	<p>Gly-Leu-Ala-Phe-Val-Leu-Arg</p> 	$C_{37}H_{62}N_{10}O_8$	774.97
DP-045 Trc'n 15;2-8	<p>Leu-Ala-Phe-Val-Leu-Arg-Gly</p> 	$C_{37}H_{62}N_{10}O_8$	774.97
DP-046 Trc'n 15;3-9	<p>Ala-Phe-Val-Leu-Arg-Gly-Lys</p> 	$C_{37}H_{63}N_{11}O_8$	789.98
DP-047 Trc'n 15;4-10	<p>Phe-Val-Leu-Arg-Gly-Lys-Ser</p> 	$C_{37}H_{63}N_{11}O_9$	805.98
DP-048 Trc'n 15;5-11	<p>Val-Leu-Arg-Gly-Lys-Ser-Leu</p> 	$C_{34}H_{65}N_{11}O_9$	771.96
DP-049 Trc'n 15;6-2	<p>Leu-Arg-Gly-Lys-Ser-Leu-Tyr</p> 	$C_{38}H_{65}N_{11}O_{10}$	836.01

Fig. 12f



# In Vitro Screening of Laminin Peptides

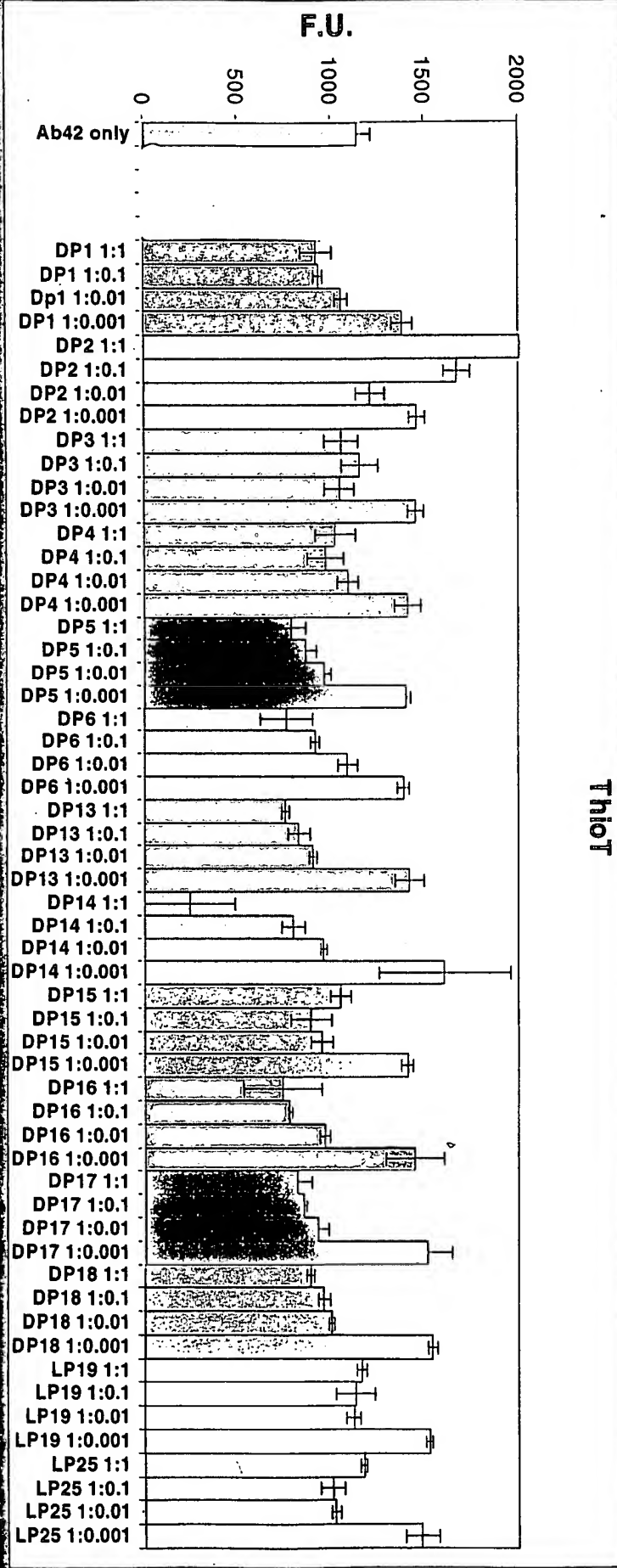
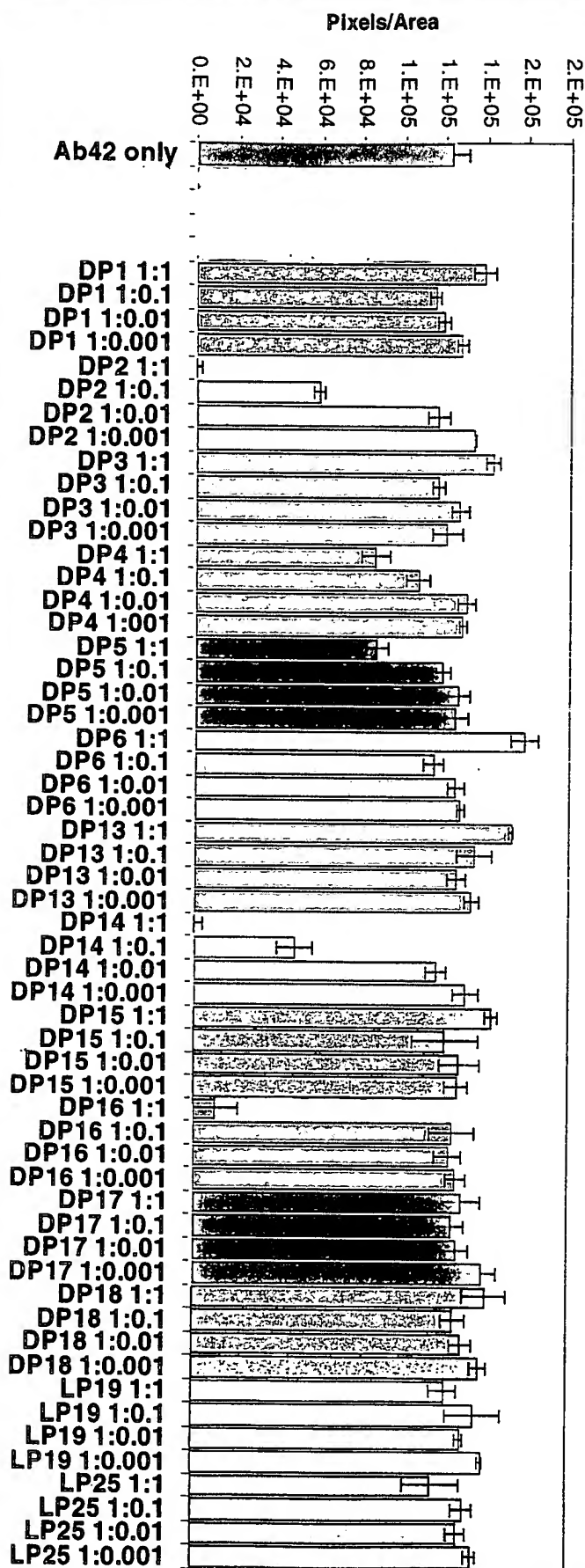


Fig. 13

# In Vitro Screening of Laminin Peptides



Congo Red Binding of Ab42 +/- Laminin Peptides

Fig. 14

# In Vitro Screening of Laminin Peptides

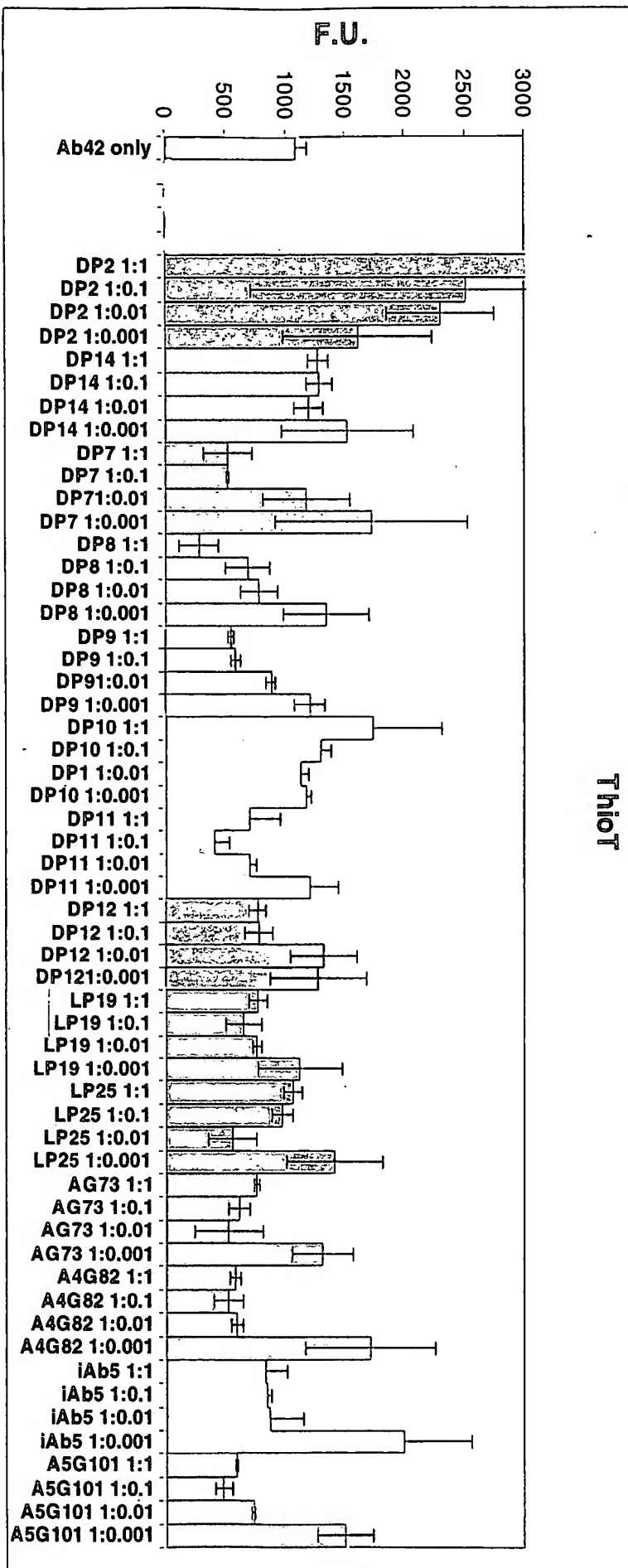


Fig. 15

# In Vitro Screening of Laminin Peptides

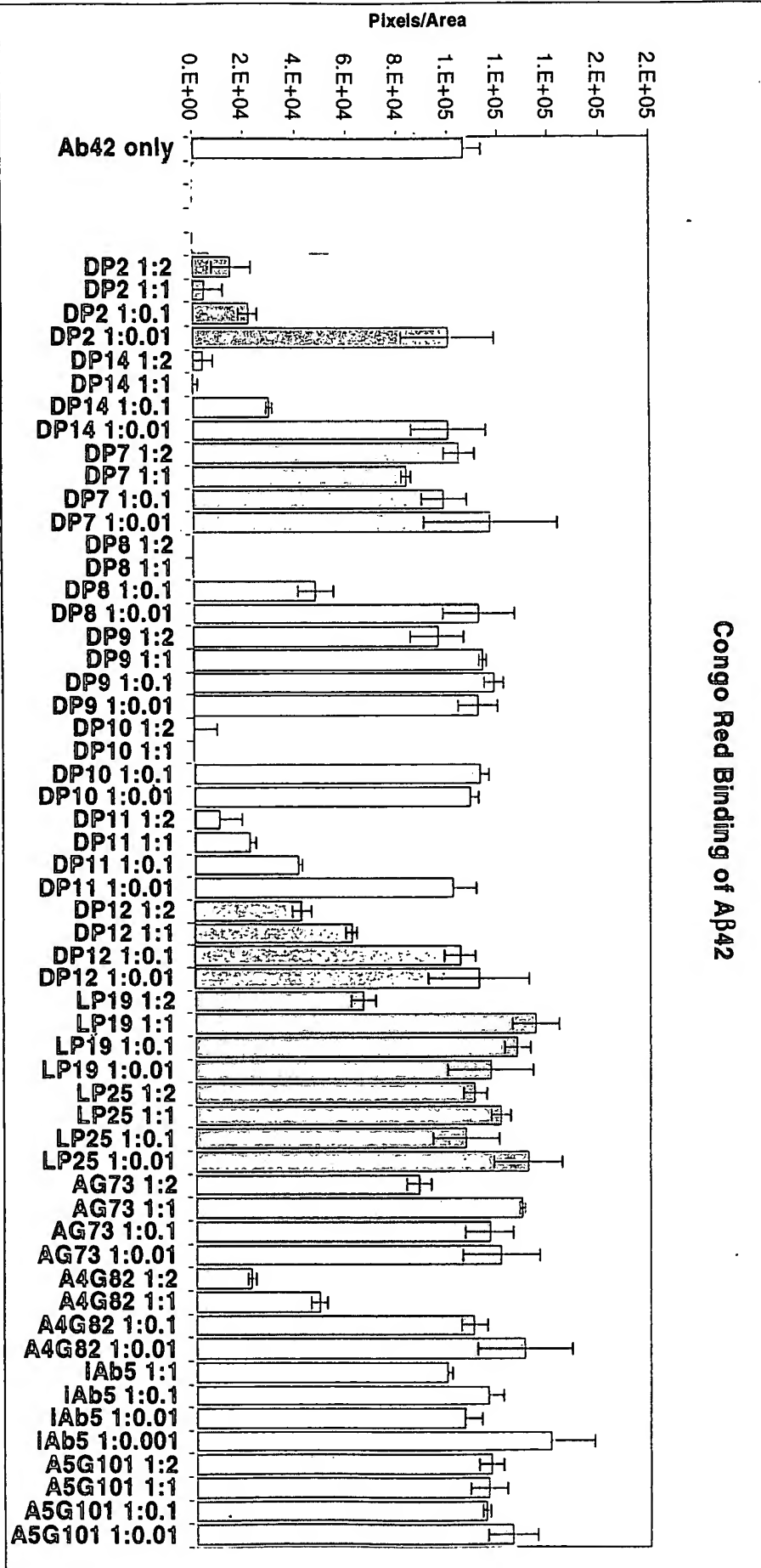
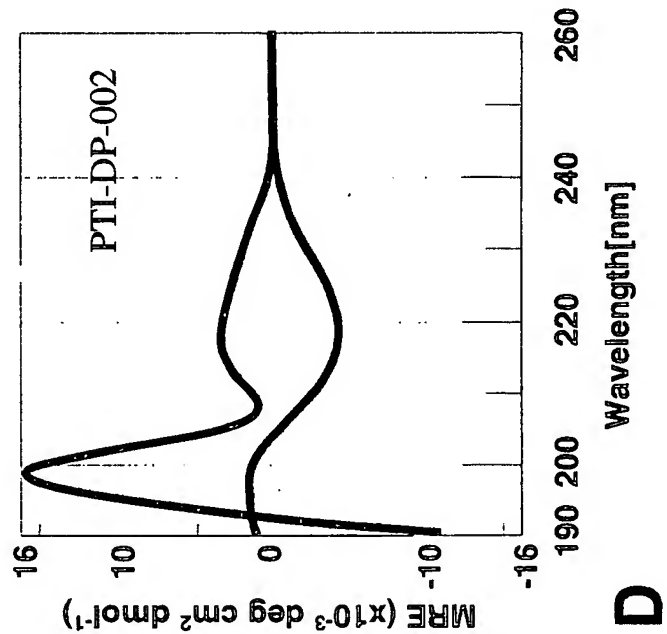
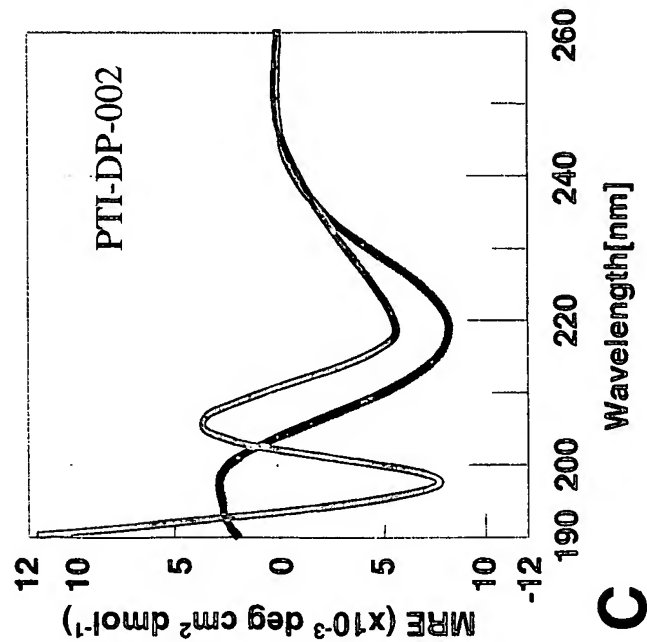
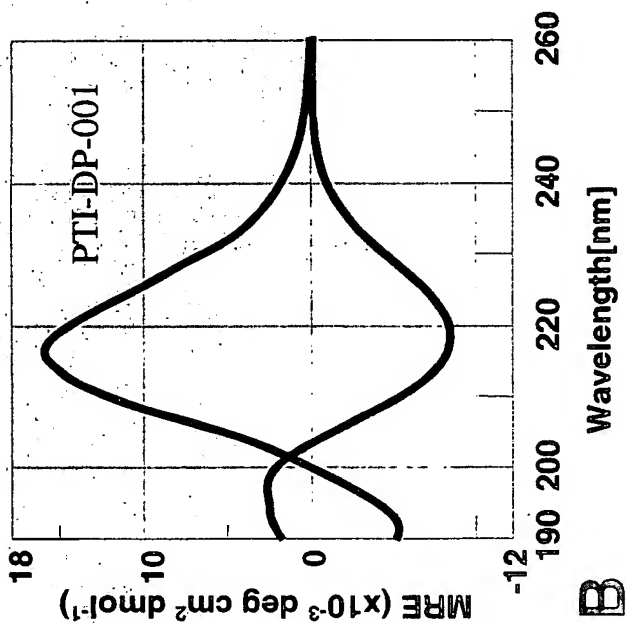
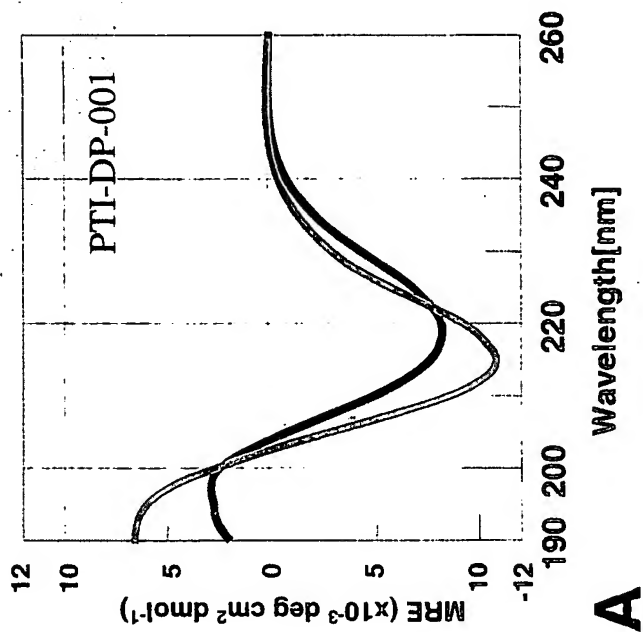


Fig. 16



**Legend:**

A $\beta$ 42 Only

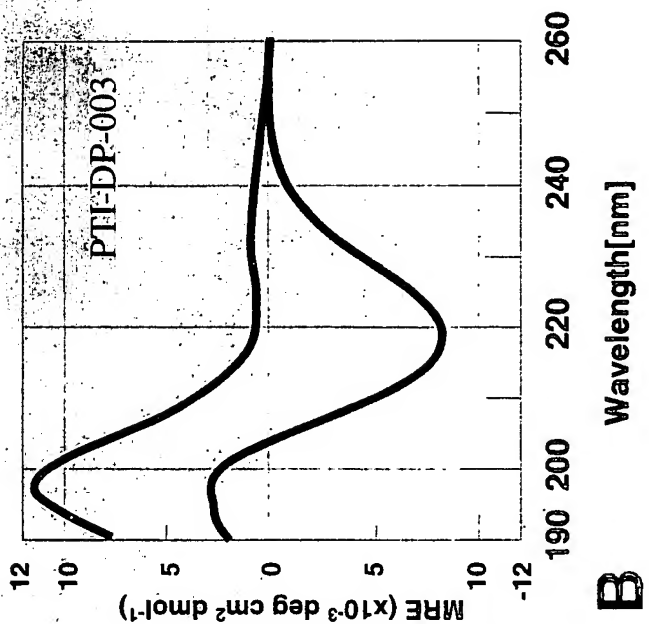
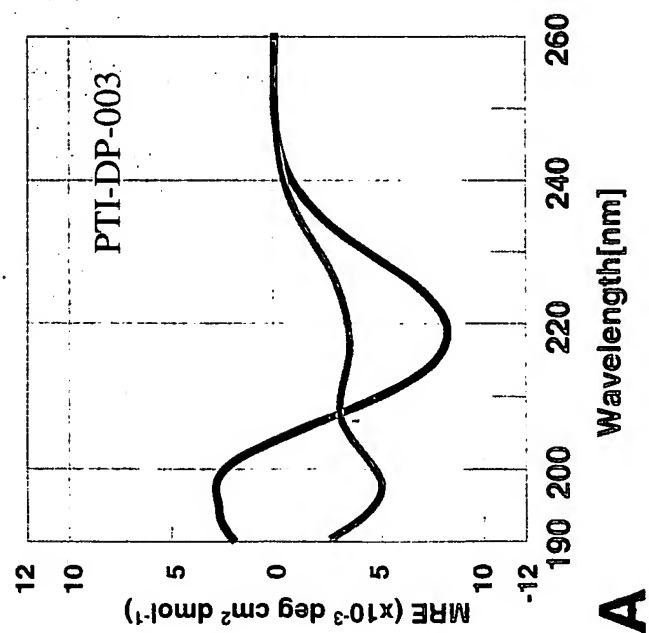
0.1 mg/ml

PTI-compound only

0.2 mg/ml

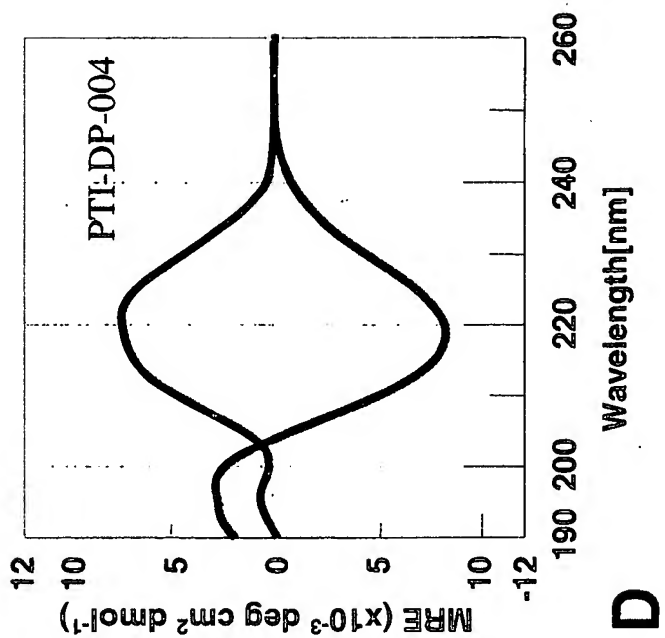
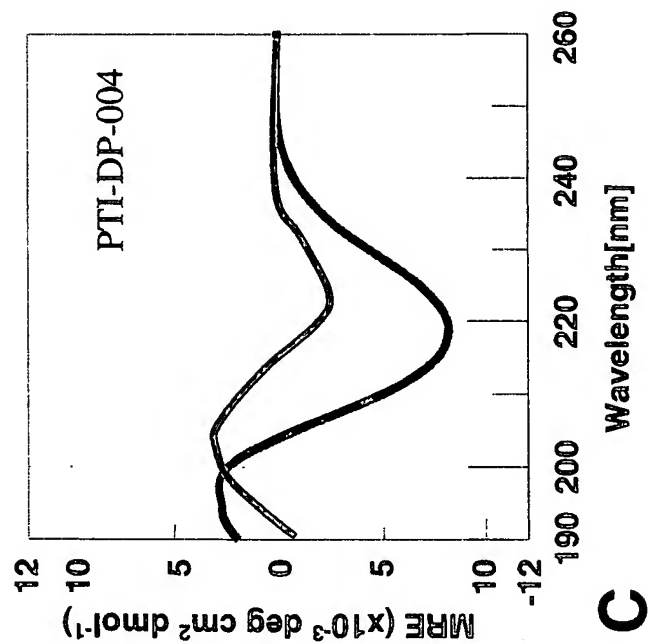
A $\beta$ 42 + PTI-compound

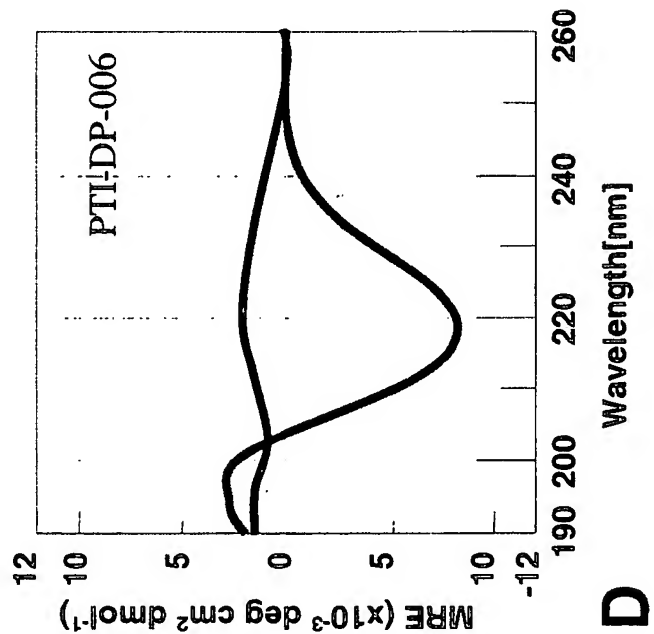
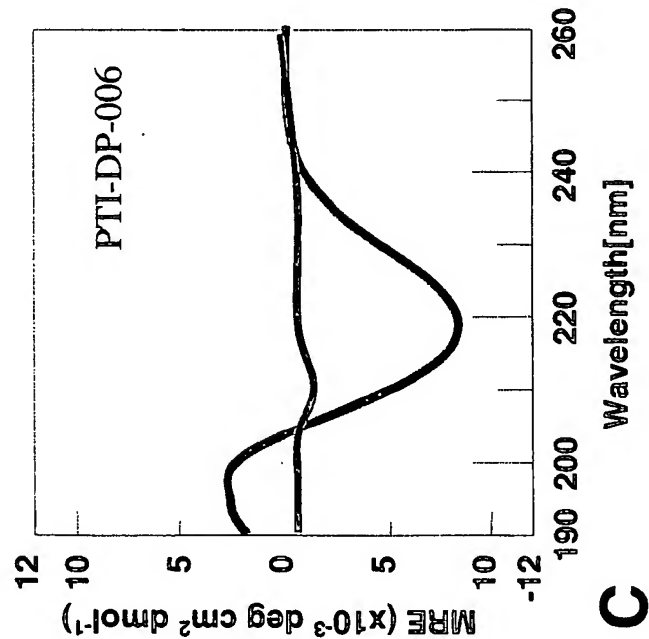
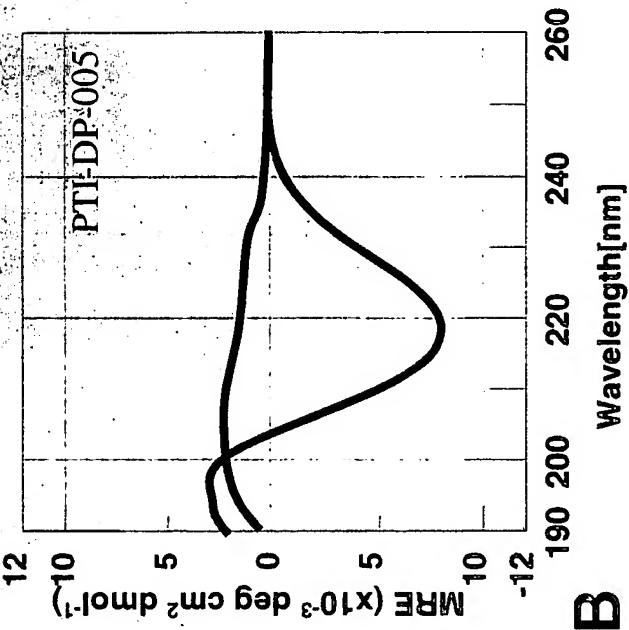
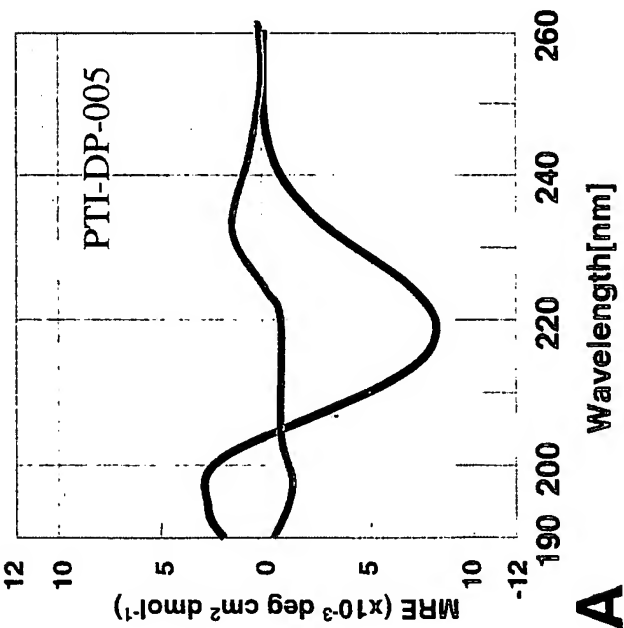
1:2 wt/wt



**Legend:**

- A $\beta$ 42 Only —
- 0.1 mg/ml —
- PTI-compound only —
- 0.2 mg/ml —
- A $\beta$ 42 + PTI-compound —
- 1:2 wt/wt —





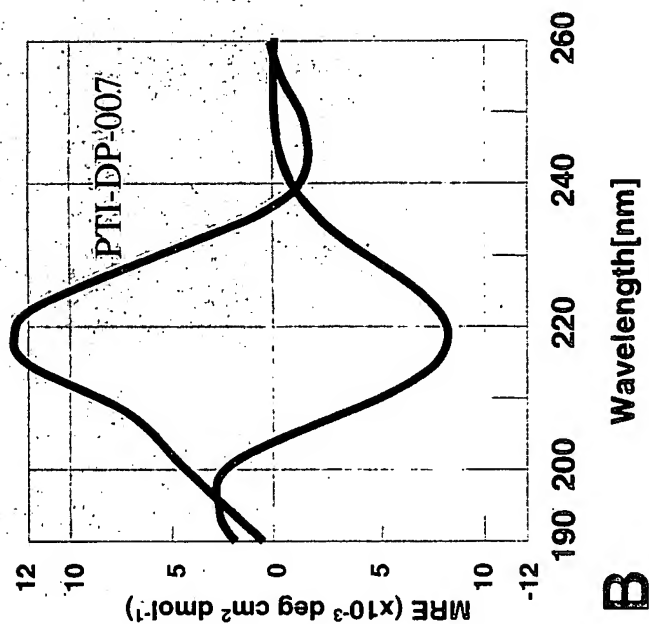
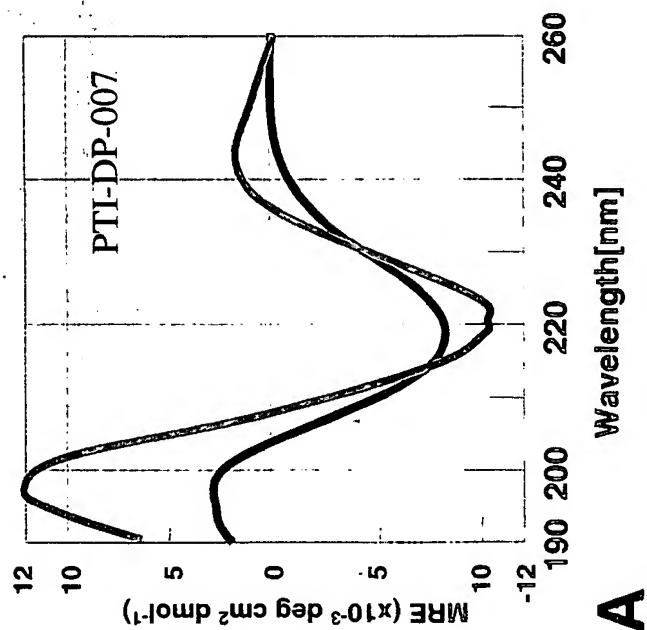
**Legend:**

A $\beta$ 42 Only  
0.1 mg/ml

PTI-compound only  
0.2 mg/ml

A $\beta$ 42 + PTI-compound  
1:2 wt/wt

Fig. 19



**Legend:**

A $\beta$ 42 Only  
0.1 mg/ml

PTI-compound only  
0.2 mg/ml

A $\beta$ 42 + PTI-compound  
1:2 wt/wt

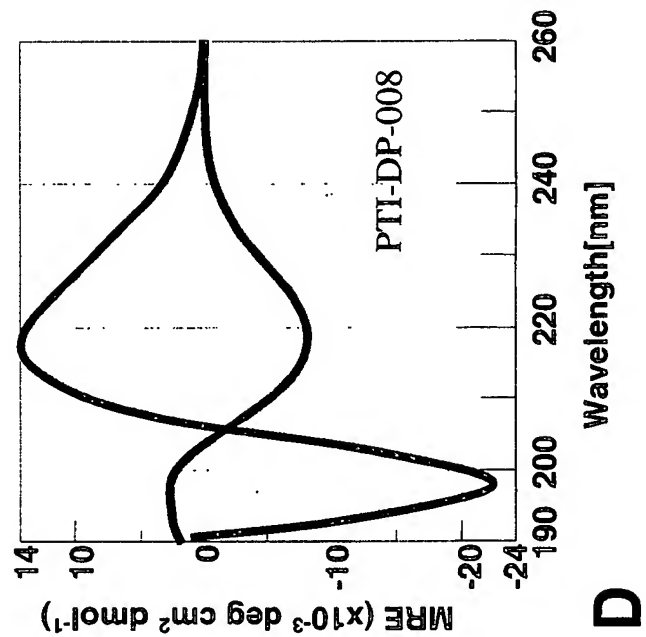
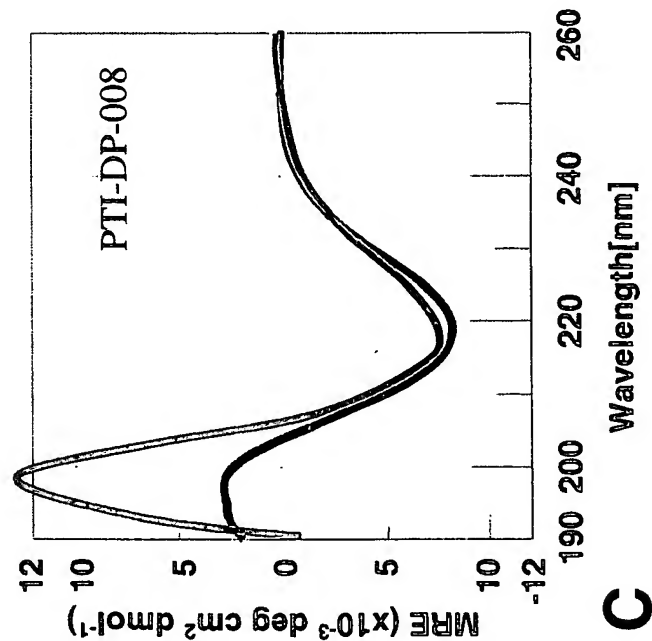
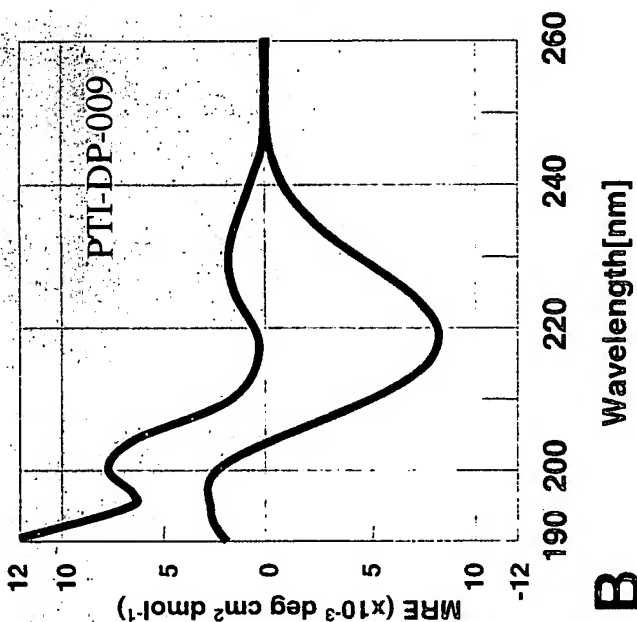
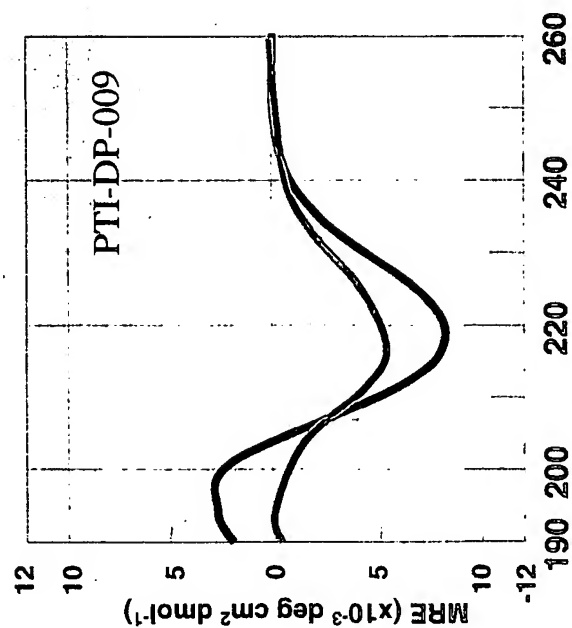


Fig. 20





**Legend:**

A $\beta$ 42 Only

0.1 mg/ml

PTI-compound only

0.2 mg/ml

A $\beta$ 42 + PTI-compound

1:2 wt/wt

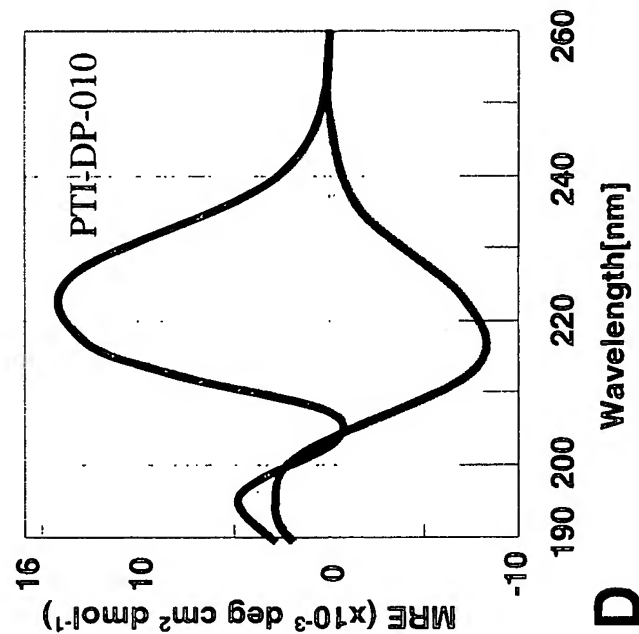
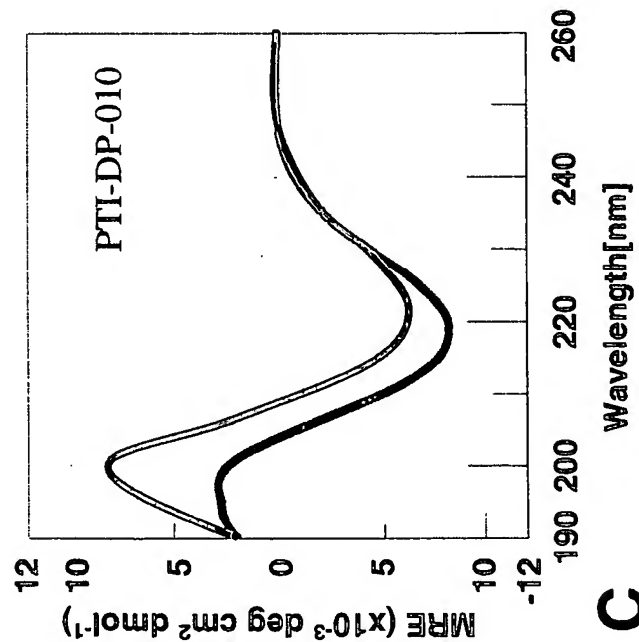
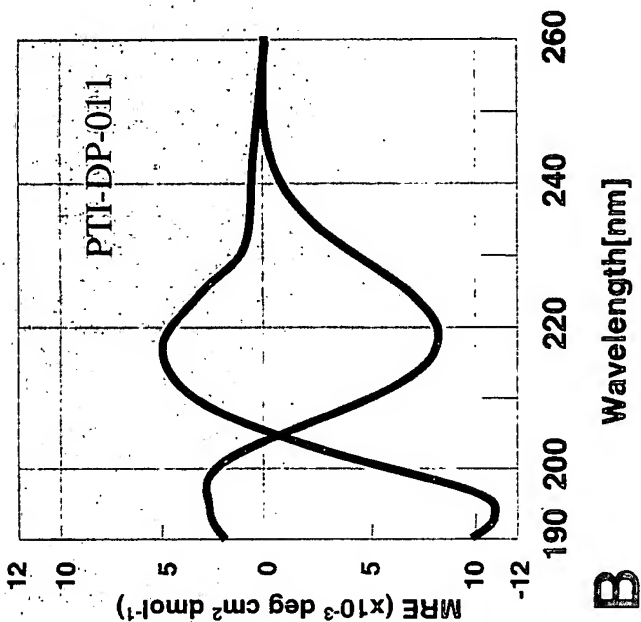
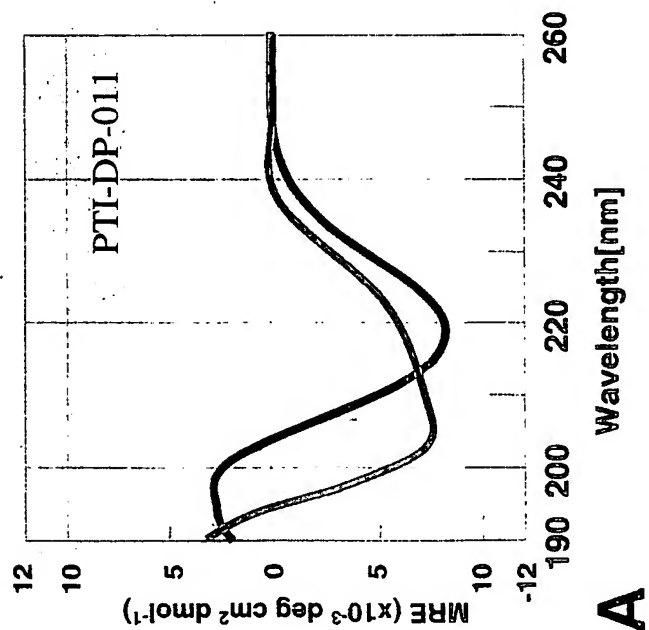


Fig. 21



**Legend:**

A $\beta$ 42 Only

0.1 mg/ml

PTI-compound only

0.2 mg/ml

A $\beta$ 42 + PTI-compound

1:2 wt/wt

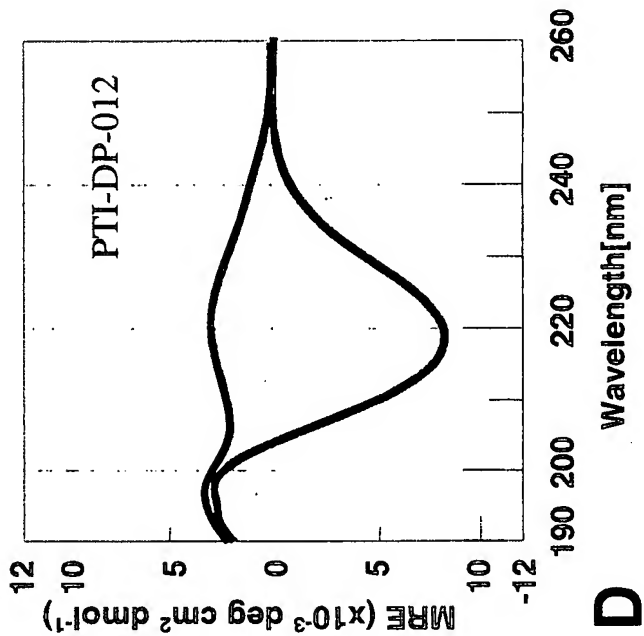
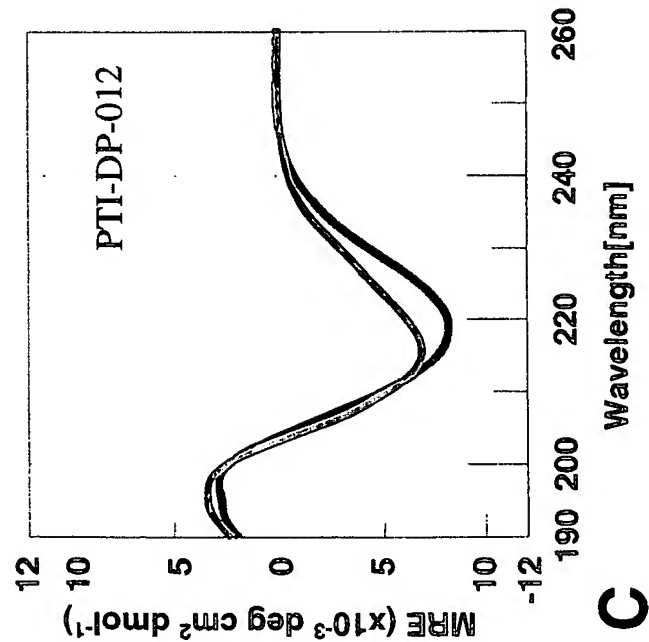
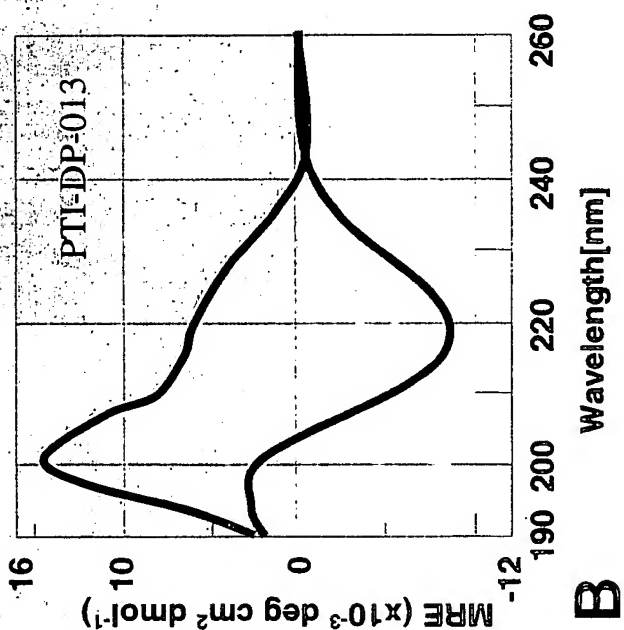
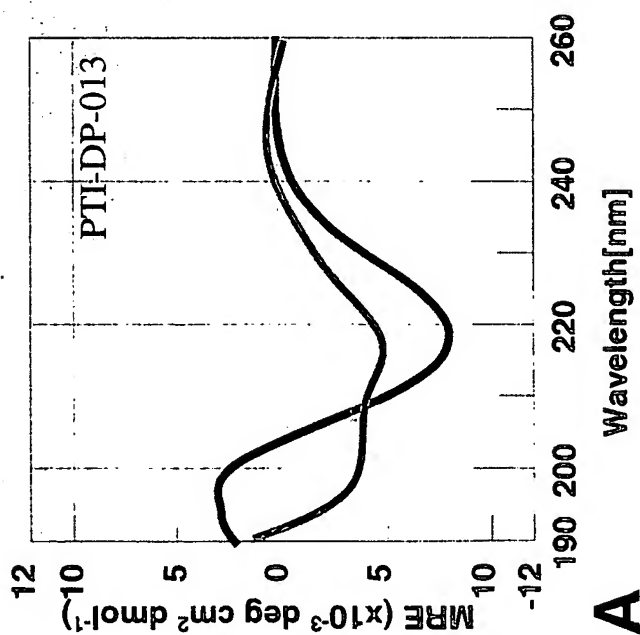


Fig. 22



**Legend:**

A $\beta$ 42 Only

0.1 mg/ml —

PTI-compound only

0.2 mg/ml —

A $\beta$ 42 + PTI-compound

1:2 wt/wt —

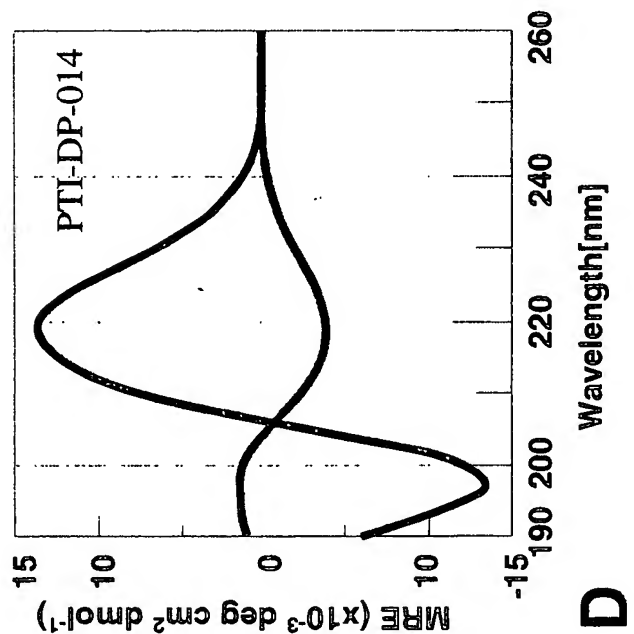
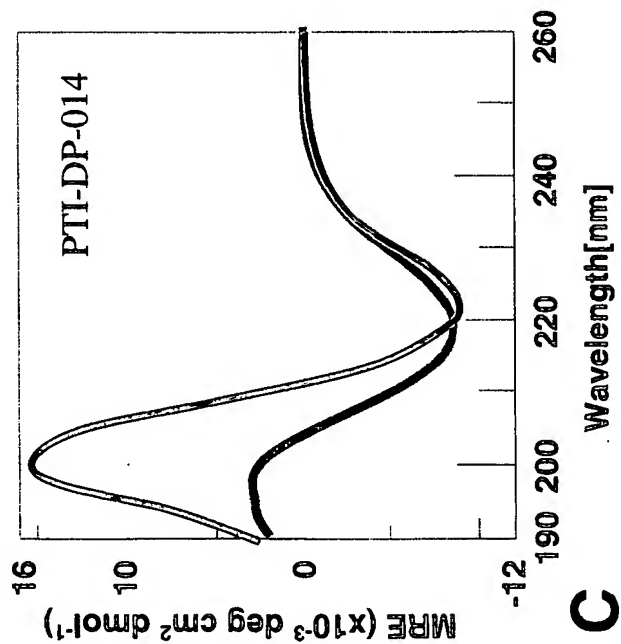
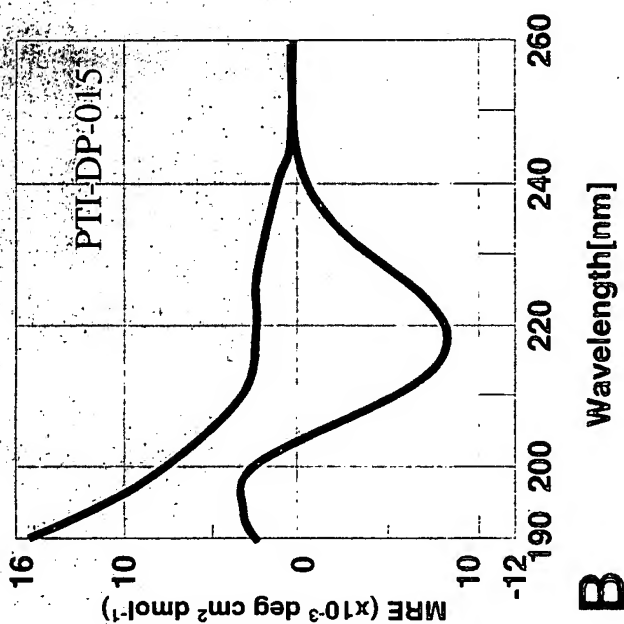
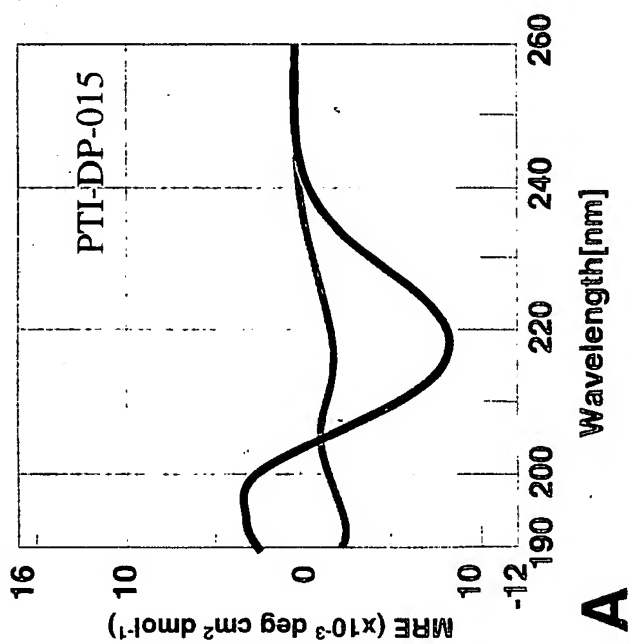


Fig. 23



**Legend:**

A $\beta$ 42 Only  
0.1 mg/ml

PTI-compound only  
0.2 mg/ml

A $\beta$ 42 + PTI-compound  
1:2 wt/wt

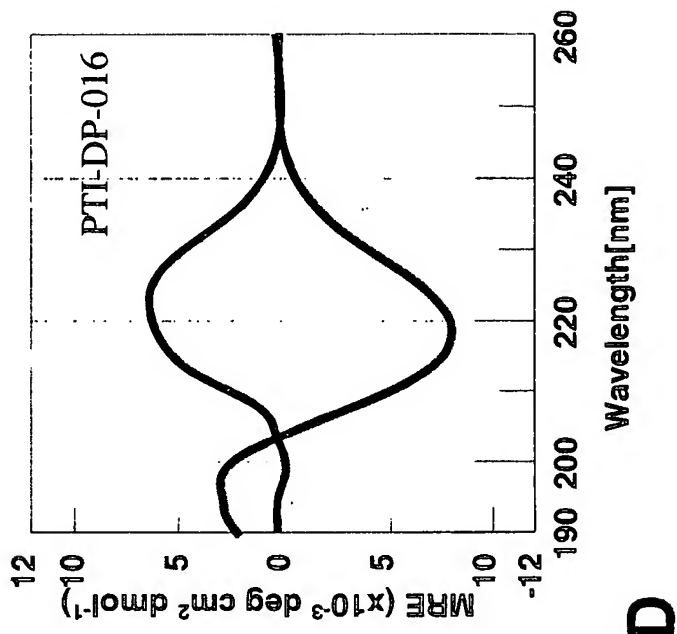
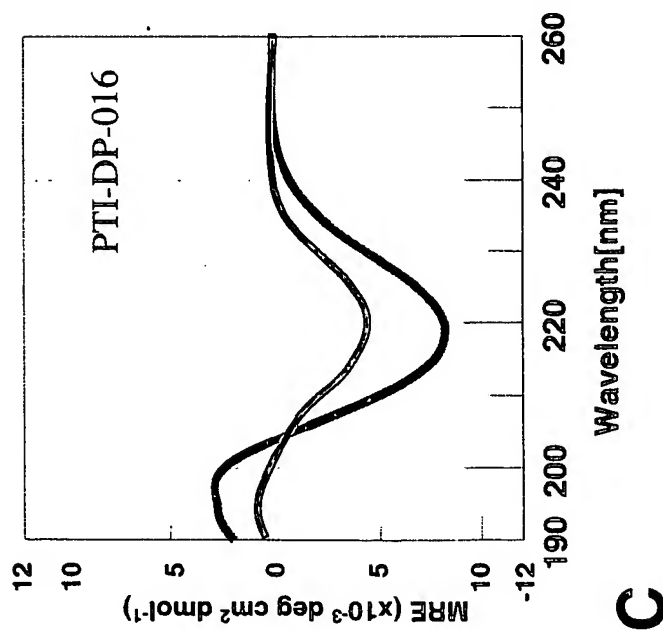
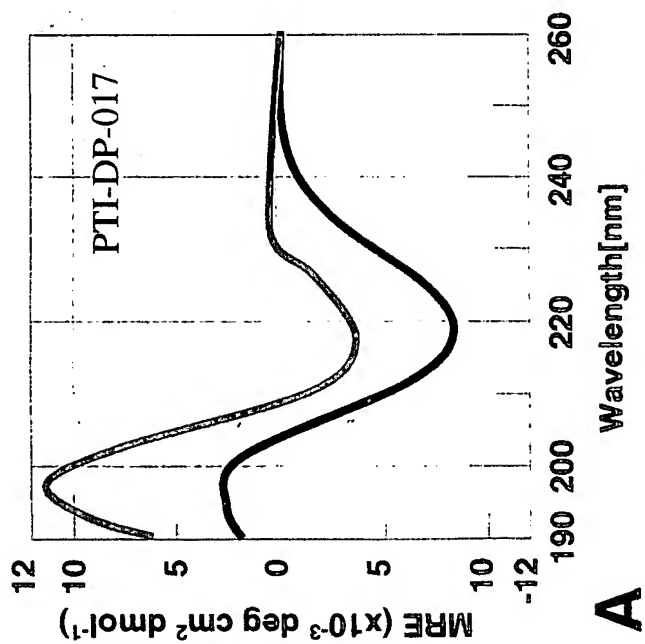
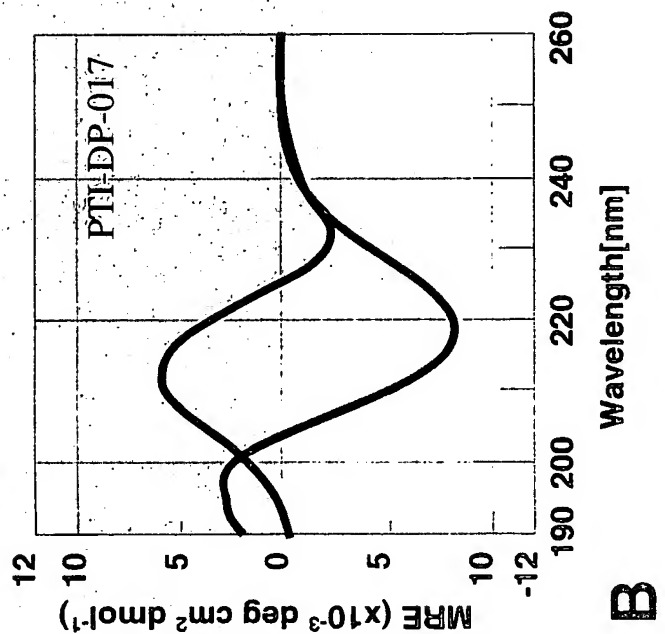


Fig. 24



**A**



**B**

**Legend:**

A $\beta$ 42 Only

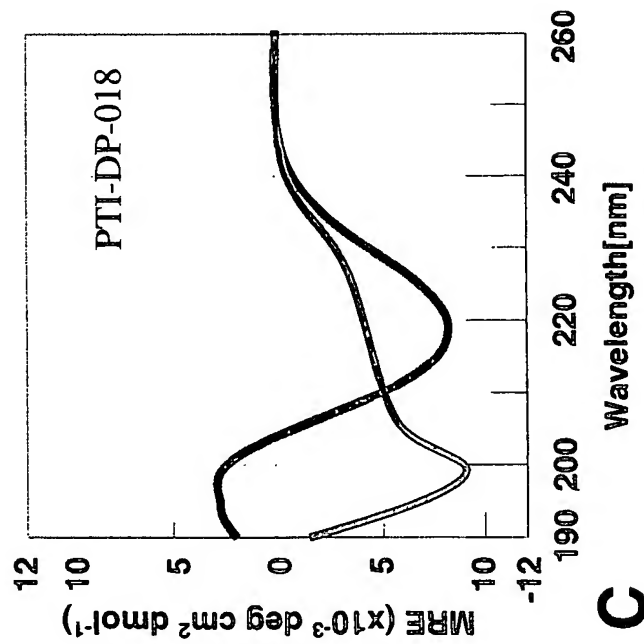
0.1 mg/ml

PTI-compound only

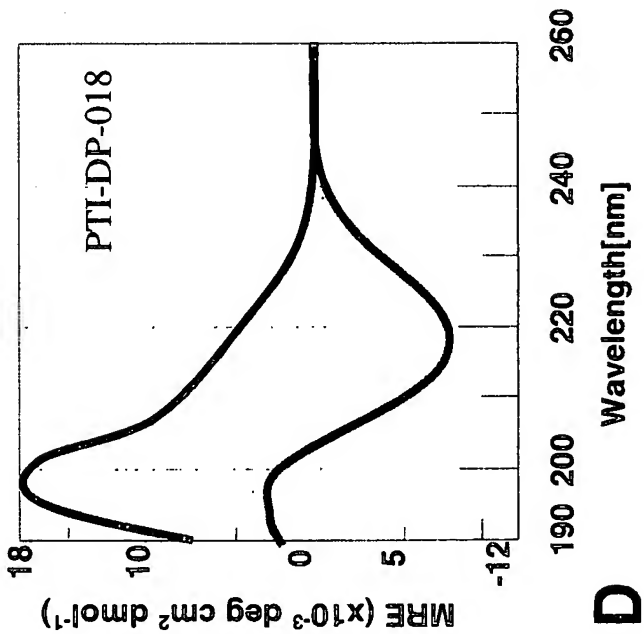
0.2 mg/ml

A $\beta$ 42 + PTI-compound

1:2 wt/wt

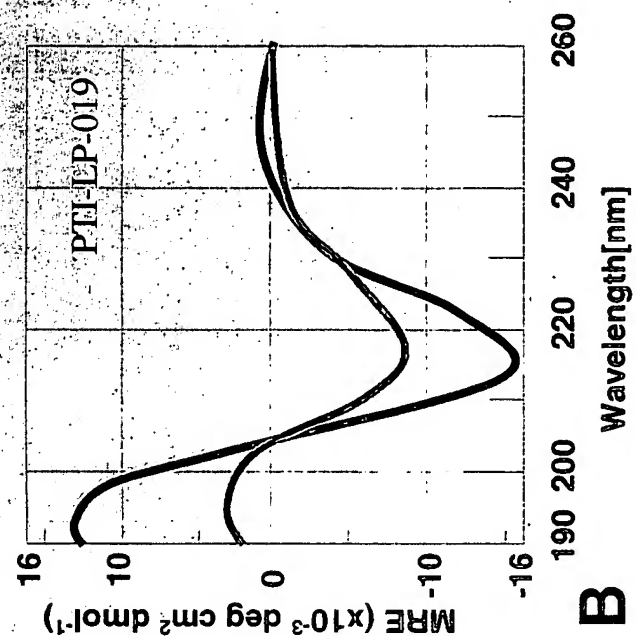
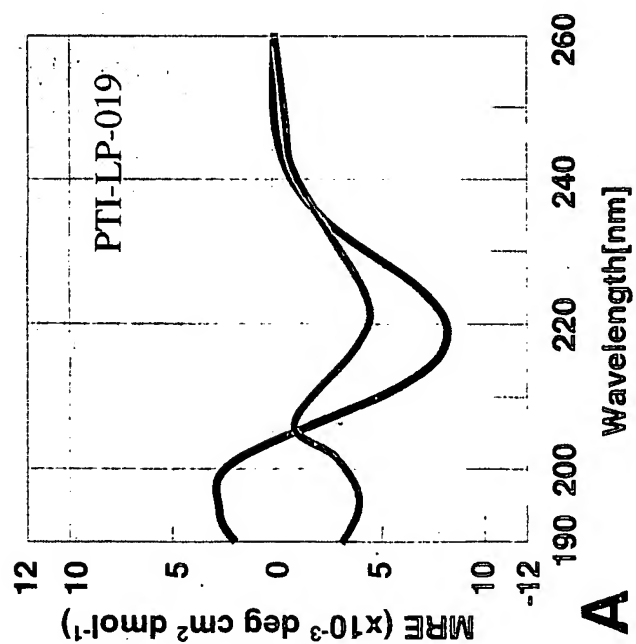


**C**



**D**

Fig. 25



**Legend:**

A $\beta$ 42 Only  
—

PTI-compound only  
—

A $\beta$ 42 + PTI-compound  
1:2 wt/wt —

**C**

**D**

CD#34